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ABSTRACT

The 1960's witnessed in Europe the development of distant study systems based, to begin with, essentially on radio and/or television together with correspondence courses. In secondary education these included the German Telekolleg and the French ETS Promotion, produced under the auspices of the Office Francais des Techniques Modernes d'Education; the success of both of which now seems assured, following that of the Italian Telescuola, an experiment brought to a halt by the Italian Radio and Television Corporation. But it is above all at the postsecondary level that initiatives have flourished, pilot projects being launched that have more often than not led to the establishment of systems that have lasted and are fast expanding. The original subject of this study was the combined use of radio/television with correspondence courses in higher education. It has been broadened to take in all multimedia distant study systems at the postsecondary level, in consequence of the general intrinsic development of these systems, in which radio/TV and correspondence courses are less and less frequently the only media used. The analyses contained in this book concentrate on those systems already in operation or projected that have been studied by the Council of Europe. (Author/PG)

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# THE COMBINED USE OF RADIO AND TELEVISION AND CORRESPONDENCE COURSES IN HIGHER EDUCATION

(European university and post-university distant study systems)

by

Robert LEFRANC

Council for Cultural Co-operation
Council of Europe
Strasbourg
1973

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The Council for Cultural Co-operation was set up by the Committee of Ministers of the Council of Europe on 1 January 1962 to draw up proposals for the cultural policy of the Council of Europe, to co-ordinate and give effect to the overall cultural programme of the organisation and to allocate the resources of the Cultural Fund. It is assisted by 3 permanent committees of senior officials: for higher education and research, for general and technical education and for out-of-school education. All the member governments of the Council of Europe, together with Greece, Finland, Spain and the Holy See are represented on these bodies (1).

In educational matters, the aim of the Council for Cultural Co-operation (CCC) is to help to create conditions in which the right educational opportunities are available to young Europeans whatever their background or level of academic accomplishment, and to facilitate their adjustment to changing political and social conditions. This entails in particular a greater rationalisation of the complex educational process. Attention is paid to all influences bearing on the acquisition of knowledge, from home television to advanced research; from the organisation of youth centres to the improvement of teacher training. The countries concerned will thereby be able to benefit from the experience of their neighbours in the planning and reform of structures, curricula and methods in all branches of education.

Since 1963 the CCC has been publishing, in English and French, a series of works of general interest entitled "Education in Europe", which record the results of expert studies and intergovernmental investigations conducted within the framework of its programme. A list of these publications will be found at the end of the volume.

Some of the volumes in this series have been published in French by Armand Colin of Paris and in English by Harraps of London.

These works are being supplemented by a series of "companion volumes" of a more specialised nature to which the present study belongs.

General Editor:

The Director of Education and of Cultural and Scientific Affairs, Council of Europe, Strasbourg (France).

The opinions expressed in these studies are not to be regarded as reflecting the policy of individual governments or of the Committee of Ministers of the Council of Europe.

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(1) For complete list, see back of cover.

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# INTRODUCTION

The 60s witnessed in Europe the development of distant study systems based, to begin with, essentially on radio and/or television together with correspondence courses. In secondary education these included the German Telekolleg and the French RTS Promotion, produced under the auspices of the Office français des techniques modernes d'Education (OFRATEME); the success of both of which now seems assured, following that of the Italian Telescuola, an experiment brought to a halt by the Italian Radio and Television Corporation.

But it is above all at the post-secondary level that initiatives have flourished, pilot projects being launched which have more often than not led to the establishment of systems which have lasted and are fast expanding.

The original subject of this study was the combined use of radio/television with correspondence courses in higher education. It has been broadened to take in all multi-media distant study systems at post-secondary level, in consequence of the general intrinsic development of these systems, in which radio/TV and correspondence courses are less and less frequently the only media used.

The analyses contained in this book concentrate on those systems already in operation or projected which have been studied by a particularly active working party set up by the Council of Europe. At the same time similar experiments undertaken in other parts of the world are compared.

The term "tele-teaching" which is sometimes used in this study for the sake of convenience, should not be taken to mean "teaching by television"; it denotes any teaching done "from a distance" (from the Greek tele, distant).

To facilitate understanding of the comparative studies which follow, a brief description will be given of these various undertakings, the main characteristics of which are also set out in tabular form at the end.

## A. Systems already in operation

### 1. The best known in Europe and in the world, is doubtless Great Britain's Open University.

Its original title was "University of the Air", and it is in fact a "last-chance" university. In 1971, its first year of operations, it catered for 25,000 students and in 1972 for 40,000, giving them an opportunity of receiving higher education which for various reasons, especially social ones, they were unable to receive in the traditional British university context.

A university in the full sense, established by Royal Charter, it has worked out highly original teaching methods - a genuine multi-media system in which radio and television play a relatively modest role in comparison with other components: text books, programmed instruction, and work in groups, each student receiving thorough supervision and guidance regionally and even locally. The Open University employs a variety of examination and assessment techniques, and awards its own degrees.

### 2. The Funkkollegs in the Federal Republic of Germany

The Education Ministries of certain Länder, radio and television stations, the University of Tübingen's German Institute for Distant Studies (Deutsches Institut für Fernstudien - DIFF), certain universities and groups of "people's universities" (Volkshochschulen) have launched operations offering teaching at a distance to adults wishing to pursue further studies at university level. These include:

a. courses organised with the help of Hessischer Rundfunk (the radio and television organisation of Land Hesse) in:

- knowledge of modern society (1966-69);

- pedagogics (1969-70) with teachers from Marburg University;

- economics (1971) with teachers from Frankfurt University;

b. courses organised with the help of Südwestfunk (the South-West German radio and television organisation) in:

- mathematics (1970-71) with teachers from the Universities of Karlsruhe and Mainz;

- languages (introduction to modern linguistics).

A true multi-media approach has been refined in the light of experience. Each Funkkolleg awards a diploma following examination.

3. In France a large number of initiatives has been taken. Most of them have proved successful and are now being carried further.

As early as 1963 Radio-Propédeutiques (1) were set up in 5 universities and shortly afterwards in 10 others. Renamed Radio-Universitaires when the "propaedeutical" examination was replaced by the Diplôme Universitaire d'Etudes Littéraires (DUEL) degree, their aim was to provide distant teaching for the first 2-year courses in arts faculties. They were gradually transformed into University Tele-teaching Centres (Centres de Télé-Enseignement Universitaires) - CTEUs, which give the same teaching and in addition usually provide instruction for the licence (BA) and maîtrise (MA) in the Universities of Paris, Lille, Rheims, Dijon, Nancy, Strasbourg, Besançon, Caen, Rennes, Bordeaux, Toulouse, Aix, Clermont-Ferrand and Grenoble.

Radio is, with correspondence courses, the most frequently used medium, and most universities "have the air" for 16 hours a week. But the media in use are rapidly becoming more diverse, and are gradually being associated in new ways to serve common aims.

Radio-Universitaires and CTEU award university degrees to those who pass conventional examinations.

The televised instruction provided by TELE-CNAM (l'enseignement télévisé du Conservatoire National des Arts et Métiers) started in 1963, and is intended above all for technicians wishing to undertake further studies and obtain promotion. This institute of higher education makes use primarily of television and correspondence courses and awards diplomas following an examination.

The Paris Universities' Audio-Visual Law Centre uses radio and correspondence courses to provide instruction for candidates for a BA in law.

Paris University III's Radio-Correspondance, set up in 1963 to provide instruction for a first degree in English, now concentrates on preparing candidates for 2 national competitive examinations, the agrégation (2) and the secondary school teaching certificate (CAPES).

The University of Grenoble gives a first-degree course in economics using correspondence courses and television.

Post-university medical education, for doctors already practising, is organised by an association with the help of the Ministries of Education and Health. The chief medium is television, the programmes being produced by the Audio-Visual Centre of the

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(1) In France the term propédeutique usually refers to the compulsory course taken by students immediately after the baccalauréat, and before entering a Grande Ecole.

(2) Competitive examination for the right to teach at a university or grammar school.

Ecole Normale Supérieure at Saint-Cloud.

For a period of 2 years (1966-68) Télé-Promotion Cadres Entreprises (TPCE) was devoted to the retraining of executives in small and medium-sized firms in 12 départements of Western France. Planned and directed by an association linked with the Rennes Law and Economics Faculty, this experiment relied mainly on bringing local audiences together and on television, the programmes being produced by the Saint-Cloud Audio-Visual Centre.

As this book deals with experiments using radio and television broadcasts, no analysis will be made here of one nevertheless very interesting experiment, that carried out at Nancy by the Centre Universitaire de Coopération Economique et Social (CUCES).

4. In the Netherlands, the Stichting Televisie Academie (TELEAC), set up in 1965, aims at broadcasting, on an average, 13-15 courses a year, some of a general cultural nature, others providing information in specialised fields, others again for retraining purposes. TELEAC works at various levels and only some of the instruction is at the higher level, in particular that given to medical practitioners and some categories of students. Although television bulks large among the methods used, systematic experimentation is made with the multi-media approach.

5. In Sweden, the Kommite för television och radio i utbildningen (TRU) was set up in 1967 to study the use of radio and television in the framework of education in its widest sense, intended for adults from a variety of educational backgrounds. Only the instruction provided for medical practitioners and some of the instruction in physics, the natural and social sciences and technology is of university level.

The title of TRU could give the impression that television and radio are the principal media used. But, in fact, TRU endeavours to diversify, scientifically and systematically, its media and their material substrates.

6. In Spain, a committee was set up on 6 May 1971 to study ways and means of providing university education from a distance. It produced a plan for a Universidad Libre a Distancia (UNILAD), to which further reference will be made later, in connection with the committee's preparatory work. This work led to the creation of the Universidad Nacional de Educacion a Distancia (UNED) by a decree of 18 August 1972. UNED is intended to democratise higher education by making it available to large numbers of potential students, and plans to use group work as well as the various modern media and correspondence teaching. It was opened in early 1973 and already has more than 8,000 students.

B. Project

One project is nearing completion:

In the Federal Republic of Germany a preparatory committee set up in 1970 has drawn up a draft contract linking universities, DIFF and radio and television stations in an association for distant studies, the Verbund für das Fernstudium (VFF). One after another the Länder and a large number of universities have signed this contract and the association should soon begin to provide instruction along the lines of the various models worked out by the Quadriga Kollegs. Courses of study will terminate in university examinations.

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(1) Since the time when the manuscript of this study was sent to the printer, the evoluation of the situation in the Federal Republic of Germany has made it necessary to give the following additional information:

"The Verbund für das Fernstudium (Association for Distant Studies), the creation of which was proposed in 1970 by a Preparatory Commission, was set up after many years of discussion in February 1974, as a much smaller experiment which will be tested during a period of 4 years. Taking part in it are: the 11 states Länder of the Federal Republic of Germany, institutions of higher education in the Federal Republic of Germany and the Deutsches Institute für Fernstudien (DIFF) (German Institute for Distant Studies). Some radio organisations will participate.

The following organs are foreseen:

- an administrative Committee composed of the 11 representatives of the Länder and, as an adviser, the Presidency of DIFF;

- a scientific Committee including the 11 representatives of higher education, and, as an adviser, the Presidency of DIFF.

The study of specific projects will be entrusted to specialised commissions and 'project groups' of higher education institutions. DIFF will run the Association and lend its services to its organs as well as to the specialised commissions and 'project groups'.

In addition to this Association for Distant Studies, the creation of a University for Distant Studies is being planned in the Land of Rhine-Westphalia."

C. Experiments outside Western Europe\

Reference will be made to 3 experiments of decided interest, for several reasons, which have been undertaken outside Western Europe, the region with which this book is concerned.

The Chicago City TV College, launched in 1956 with the help of the Ford Foundation, offers Chicago students of all ages extra-mural instruction to prepare them for the leaving certificates of the city's Junior Colleges, of which it is an offshoot. Its methods are indeed based on the use of television but also on the co-ordinated use of numerous other media.

In 1965 the Politechnika Televizyjna (Television Polytechnic) of Poland introduced, initially with the help of UNESCO, televised courses in general technical education, the "common core" for the first 2 years of higher technical studies, intended to supplement correspondence and evening courses. Their public, made up of students and technicians, seeks as a general rule to obtain a diploma awarded after a series of examinations.

Finally, reference will be made to 2 rival Japanese projects for universities of the air.

- One is being undertaken by universities which wish to have their own radio and television networks and to produce all the necessary media themselves.

- The other is a project of the National Radio and Television Organisation Nippon Hoso Kyokai (NHK) which, on the basis of its experience in secondary education at a distance (Correspondence Senior High School), is seeking the co-operation of the universities to help it set up a university of the air.

These 2 projects are typical of the competition in some countries between university bodies and broadcasting and television companies. Fortunately in many other countries this rivalry is replaced by fruitful collaboration, the best guarantee of success for university distant teaching schemes.

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On the basis of an examination of these different types of university teaching at a distance, an analysis will be made in the following chapters of their aims, publics, statutes, methods and organisation, and of the results already achieved in various fields.

# CHAPTER I

## AIMS

University teaching at a distance sometimes pursues quite specific aims, sometimes very varied ones. It may lead to the obtaining of a degree or may seek only to offer further training or retraining to graduates in certain occupations. Sometimes its aim is education, in the broad sense of the term, or the diffusion of a high level of culture.

A. Obtaining a degree

Some systems have been set up to enable students, or certain categories of them, to obtain degrees. Sometimes teaching at a distance makes it possible to complete part of the course, for a degree examination. At other times teaching at a distance covers the whole of the degree course. Lastly, some organisations offer a whole range of degrees.

1. Distant studies forming only part of those required for a degree

This is the case, for example, with the teaching provided by Grenoble University. Students are given the opportunity to study by multi-media distant teaching methods one of the subjects in the first-year economics curriculum: economic history. But even here the entire course of study is not covered by such methods.

Since 1970-71 Paris University III, through its Radio-Correspondance courses, has prepared candidates - though only in part and only in a single subject, namely English - for 2 national competitive examinations, the secondary school teachers' training certificate (CAPES) and the agrégation.

Previously, since 1963, Radio-Correspondance had fluctuated, in keeping with the changing status of the universities, between various formulas, ranging from complete preparation for the licence to instruction for part of this course.

The service has operated since October 1963 in the framework of the Paris Arts Faculty, more particularly that of the Institute of English and North American Studies. From 1963 to 1967 full preparation was given for the certificate of practical English studies: exercises in translation from English for the written examination, courses in British life and culture for the oral, and guidance in phonetics, the spoken language and translation methods. After the reform of higher education Radio-Correspondance prepared students (in 1967-68) for the translation of the language certificate and for the oral examination in "life and culture" (CI). In 1968-69, despite the fact that the courses began very late (on 17 February 1969), Radio-Correspondance offered the full course for the certificate (English translation and literature).

2. Distant studies providing a coherent and comprehensive degree course

The Paris Universities' Audio-Visual Law Centre prepared students for the first law degree.

In France, also, the Radio-Propédeutiques provided a full course of distant studies for the examination for the arts diploma, awarded at the end of the first 2 years of higher education.

TELE-CNAM originally provided instruction for the qualification first of senior technician, then of engineer.

Similarly, the Polish Television Polytechnic provides a single programme for the first 2 years of higher education, the "Fundamentals of Technology", a common-core course before specialisation within this subject.

The aims of the project were formulated in the following way:

"Television is to be incorporated into the first 2 years of technical studies in the framework of the extra-mural system, ie into the course 'Fundamentals of Technology'.

The function allocated to television is to have several aspects:

to supplement the teaching facilities provided by the evening courses, presenting the most difficult subjects and in this way elaborating the course for the students;

to provide the correspondence course students with lessons substituting normal classroom teaching. The 3-day school sessions, in which the students must participate 3 days a month at the technical universities, could then assume a more facultative character, thereby eliminating the tiring journeys the students have to make;

to demand a definite rhythm of work on the part of the students, and to induce them to study more systematically;

to promote the participants' motivation, and in so doing cutting the number of drop-outs.

Television also enables prospective participants interested in the courses to appraise their ability correctly, as they can follow the courses without being forced to enrol or to admit that the material presented was too difficult, so that they had to give up.

The educational situation is to be promoted by means of the multiplication effect of television, the programmes of which can be received by 80% of the population of Poland. Many employees living in areas too far from the next university, who were therefore not able to take part in further education courses, can in this way nevertheless continue their education at university level. Thus, this enterprise corresponds to the principle of equal educational possibilities for all." (1)

3. Distant studies offering several study courses leading to different types of degrees

The French Radios-Universitaires and Centres de Télé-Enseignement Universitaire (CTEU), successors to the Radio-Propédeutiques, provide a wide range of instruction leading in the first place to various DUEL in the arts, eg in French, English, German, philosophy and history, awarded after the first 2 years of literary studies in the universities. Instruction is also given for the licence and sometimes for the maîtrise in the same subjects.

The Chicago TV College provides all the instruction normally given in a Junior College, leading to the same degrees or diplomas.

Since 1956 the inhabitants of Chicago and the neighbouring communities have been provided with the possibility of participating in television courses presenting the complete curriculum of the American Junior College, and of attaining the degree of an Associate of Arts, after having passed the course examinations. The curriculum of the Junior College continues from the High School curriculum, consisting of the 13th and 14th grades, ie the first 2 years of university study within the framework of the US educational system. By virtue of its special combination of general and vocational subjects, the curriculum of Junior College offers the students full qualifications in certain fields of occupation. Thus, the degree of an Associate of Arts is a separate and final diploma. This degree does, however, also justify a student to enrol in the third year of some universities, and enables him to apply for studying at one of the more reputed and famous universities, which have a stricter selective policy than other universities. In this way the Associate of Arts degree can serve to pave the way to higher academic qualifications and professions.

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(1) 33, p. 153.

The concept underlying the TV college was to provide further education facilities to people who had been unable to attend a regular college due to exceptional family or professional conditions.

The second, very pragmatical reason underlying this project, was to remove the burden of too high a number of students from the City Colleges of Chicago (formerly known as Chicago City Junior College) by broadcasting television courses in certain subjects (1).

Attention should be drawn here to a new idea which will be developed later: alongside the original aim of offering the full curriculum to some students, the possibility now exists of providing complementary tuition for the majority of intra-mural students.

The aims of the Open University were defined by the Chancellor in his inaugural address on 23 July 1969:

"We are open, first, as to people. Not for us the carefully regulated escalation from one educational level to the next by which the traditional universities establish their criteria for admission.

The first and most urgent task before us is to cater for the many thousands of people, fully capable of a higher education, who, for one reason or another, do not get it or do not get as much of it as they can turn to advantage, or as they discover, sometimes too late, that they need. Only in recent years have we come to realise how many such people there are, and how large are the gaps in educational provision through which they can fall. The existing system, for all its expansion, misses and leaves aside a great unused reservoir of human talent and potential. Men and women drop out through failures in the system, through disadvantages of their environment, through mistakes of their own judgement, through sheer bad luck. These are our primary material. To them we offer a further opportunity.

But if this were all, we could hardly call ourselves a University. This is not simply an educational rescue mission - though that is our first task, and we do not decry it. But we also aim wider and higher. Wherever there is an unprovided need for higher education, supplementing the existing provision, there is our constituency ..... (2).

These are ambitious aims, for they imply that the Open University should cover all traditional university subjects. This was made clear by the Chancellor in his address:

"Students are not confined to one or 2 subjects; their programmes of study are designed to embrace a wide range of subjects and several disciplines. Students can study both arts and science subjects and, as befits a university which terms itself open, there are as few restrictions on choice as possible." (3)

It will be observed, however, that at that time only "arts and science subjects" were mentioned. In 1972-73 the university is offering 6 fields of study (arts, education, mathematics, science, social sciences and technology) at undergraduate level, terminating in a degree.

When we came to consider the degrees that would be awarded we were determined to ensure that there would be maximum flexibility so that a student could take a degree by drawing on courses from several faculties, and so that a student who began studying in one faculty could, at any stage, change direction and move over to study in another. It is virtually impossible to achieve this sort of flexibility if several degrees, all with different regulations, are initiated. The Senate, supported by the Council, therefore decided that we should offer only one degree for undergraduates.

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(1) 33, p. 221.

(2) 117, p. 9.

(3) 117, p. 17.

This decision led, naturally, to a consideration of what the name of our degree should be. We could have chosen some wholly new name, but this might have caused difficulties for our graduates who would have had to explain to employers and others just what this new name meant. On the other hand, if we chose a name that was already used commonly by other universities, we had to ensure that we were not running counter to established practice; because if we did break the established rules, our graduates would again have problems in explaining this to employers and others.

In consequence we have decided to offer only the degree of Bachelor of Arts (BA) with or without honours, and this degree will be awarded even if nearly all the courses that a student takes are in science or technology. We are aware that this may cause some difficulty for graduates who have to explain that their BA degree is comparable to a BSc from another university. On the other hand, there are precedents for this, as the Universities of Oxford and Cambridge and many other universities in the English-speaking world already follow the same pattern; they, too, award only a BA degree even if all the courses are in science or technology.

The certificate issued to graduates will list all the courses successfully completed so that in no case should there by any doubt as to the nature of the studies that a student has undertaken throughout his undergraduate career." (1)

But as soon as possible the Open University proposes to offer other courses of study and degrees.

"The university will offer courses leading to higher degrees to those who are already graduates or who possess equivalent qualifications. Like our undergraduate degree, these higher degrees can be obtained by part-time study and by the acquisition of a number of credits; but in addition to credits in individual courses, which will be organised on the same basis as undergraduate courses, there will also be 'research credits'." (2)

Finally, the Open University intends in the future to diversify yet further its study courses and degrees:

"The university intends in later years to offer diplomas in special topics to cover the needs of those requiring further educational courses after experience in industry, commerce or the professions. The university also offers the degrees of Doctor of Letters (D Litt) and Doctor of Science (DSc) but these are available only to graduates of the Open University or to members of the full-time staff of the Open University." (3)

The following arguments were put forward in the report of the committee set up to prepare UNED in Spain:

"To these 3 aims - namely solving the problem of 'education for all', extending equality of opportunity in university education, and conducting an advanced educational experiment - we can add the following further undoubted advantages of UNILAD:

a. it will enable students to benefit to the maximum (multiplier effect in time and space) from the lectures of the most eminent teachers, both national and foreign, in the various specialities;

b. it will provide the appropriate instrument for further training and permanent education;

c. it will permit the attainment of a more rational demographic distribution in higher education;

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(1) 117, p. 31.

(2) 117, p. 32.

(3) 117, p. 34.

d. it will have notable long-term social consequences in that it will provide the labour market with an adequate number of specialists, who will be increasingly necessary in the technological society of the future."

These aims were in keeping with the goals laid down in Section 47.1 of the General Education Act of 4 August 1970:

"In order to provide educational opportunities for persons who are unable to attend ordinary educational centres regularly or keep to regular schedules and time-tables, the Ministry of Education and Science and other competent bodies shall determine the means whereby education may be dispensed by correspondence, radio and television." (1)

In defining the aims and objectives, the preparatory committee laid as much emphasis on research as on education.

The spirit of scholarship and humanist training

"A university will fail as such if it does no more than train good professionals.

It is precisely in the humanist training it provides for students and in the inculcation of a genuine spirit of scholarship that UNILAD can claim to be creating its own style in teaching at a distance.

It plans to engender a scholarly spirit and to provide a humanist training by the 2 following methods:

- encouragement and promotion of horizonatal contacts among students, since it is fundamental that young people should exchange ideas;

- provision of a supplementary teaching programme independent of strictly scientific and professional instruction.

Regional centres and compulsory meeting days are planned to satisfy the first requirement. As for the second, a Committee on Humanist Training is to be established to draw up programmes of cultural activities, both compulsory and optional, directed towards the all-round education of UNILAD students."

Research

Educational research

"The new university must have a research team working for it that is able to detect rapidly any possible shortcomings and to work out and apply appropriate remedies.

In addition to this function of perpetual review, the team should engage in constant educational research. It would be unpardonable not to profit from the excellent conditions offered by UNILAD for such research, since it is the first time that audio-visual means, correspondence courses and automation are to be fully used at university level; it is not easy for the traditional university to provide these."

Scientific research

"If the academic level of UNILAD is not to be lower than that of the traditional universities, the scientific part of the teaching staff must be comparable in the 2 types of institution." (2)

UNED was deliberately designed as part of the university system. "UNED does not constitute a break with the traditional university, nor does it claim to be a substitute for it. Having the same rank and the attributes as the traditional universities, and possessing a legal status and resources of its own, UNED signifies

(1) 184, p. 4.

(2) 184, p. 4.

methodological renewal in the field of university teaching, and hence a reform of the traditional educational system." (1)

The aims of UNED were defined as follows in the same report:

"UNED has the following immediate, practical objectives:

- to provide distant higher education equivalent in content to that dispensed by other universities;

- not to restrict admission to this type of education, provided it is compatible with the study capacity of persons who, for whatever reason, are not or were not able to attend a traditional university. UNED is open to all persons engaged in an occupation, regardless of their age and place of residence;

- gradually to replace unsupervised learning by 'supervised' study suited to the legitimate needs and interests of students;

- .....

- to constitute a suitable vehicle for further education and permanent education, and hence for the general culture of the country." (2)

In accordance with these aims, UNED is offering a range of university studies which is already substantial and is to be gradually extended further. When inaugurated in January 1973, UNED possessed 2 faculties: a faculty of philosophy and letters and a faculty of law.

The faculty of philosophy and letters offers courses in Spanish and Spanish literature, the fundamentals of philosophy, world history, Latin and Greek.

Law students have a choice between Roman Law, the history of law, constitutional law, civil law and international law.

These courses belong to the first part of university studies, and the relevant diplomas are awarded in respect thereof.

There are plans for adding the following subjects as from 1 January 1974 (ie at the start of UNED's second year of operation): physics, chemistry, economics, mathematics and electronic engineering. In addition, it has been announced that degree and doctorate courses are to be introduced in stages.

The report of the provisional committee of the Verbund für das Fernstudium (VFF) lays down equally wide and ambitious aims.

"This system, backed by the Federation and the Länder, should be worked out in the framework of an association of all higher educational bodies and radio and television stations.

It should help to satisfy society's demands for education and should contribute to:

a. reforming higher education and training;

b. making more places available in institutions of higher education;

c. giving everybody access to these institutions.

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(1) 184, p. 4.

(2) 184, pp. 5-6.

Development of this system demands clear definition of the organisational aims and principles and must form part of a long-term plan for education:

- development of distant study units at all levels from the beginning of higher education (Erststudium)to continued further training for graduates (Kontaktstudium);

- research in the field of distant study, with emphasis on teaching methods and the organisation of studies in multi-media systems;

- encouragement of the rising generation, especially in didactics and the study of media, by giving them a direct share in research." (1)

B. Post-university advanced training and refresher courses

Certain distant study systems dispense instruction with very specific and limited objectives.

The Association for the Development of Continued Medical Education by Television aims, as its name indicates, at "developing continued medical education by all methods, particularly by the use of radio, television and audio-visual means". The objective is precise: continued further training for graduates.

Similarly, the French experiment TPCE concerned itself with the retraining of executives in small firms in Western France.

The Quadriga Funkkolleg in Pedagogy is concerned with the further training of teaching staff. This training terminates in examinations, certificates and diplomas, which is exceptional for courses at post-university level.

Other examples of specific operations at post-university level are certain TELEAC and TRU programmes, for example, in the case of the former, those designed for the medical corps, and in that of the latter, the programmes on the economics of the labour market, obstetrics and educational technology. In addition, TRU has produced courses in differential and integral calculus, in aspects of algebra and mechanics, and in physics and mathematical statistics for use in technological institutes.

C. General education at post-university level

However, in addition to producing specific and limited programmes for particular audiences and purposes, distant study systems also aim at offering general, high-level education to wide publics.

The French CTEU, for example, as well as providing teaching for the DUEL, licence and maîtrise, aim, according to their statutes, "to participate in permanent education through training and further training courses". They are keen to be in the vanguard as regards teaching methods and thus hope "to carry out or to participate in pedagogic or technical research in the application of audio-visual methods to education".

TELE-CNAM, when sending out over Channel 2 of the ORTF, a number of its broadcasts made for the point-to-point network, stated that its guiding principle had not been to "extend its range of influence", but to provide a service with the following aims:

"- to broadcast the courses to areas where there are no college or university facilities, not so much to meet the educational needs and requirements of such areas, but rather to stimulate a desire for further education among the people living there;

(1) 169, p. 7.

- to arouse motivations for technical studies at a university level and to make viewers interested in permanent education;

- to provide the basic knowledge and requirements for studying at a college or university, to convey the knowledge and skills needed for dealing with a special subject, and to enable the viewers to acquire fundamental aspects or scientific data in a novel or relatively unknown field;

- to give participants the possibility of sitting for examinations which are acknowledged by adult education institutes or by the participant's employer". (1)

Elsewhere it is again stated that "one of the functions of Conservatoire National des Arts et Métiers (CNAM) is to provide college level courses for employed persons in science, economics, the humanities, and law. The lessons in these subjects are presented after normal working hours". (2)

Apart from certain very specialised teaching, TELEAC's aims are defined in very general terms:

"The TELEAC Foundation aims to put television at the service of education. The rapid changes in contemporary society make this a duty for our generation. This change confronts us with new forms of society and culture, in which other ways of life, thought and work are valid. Appropriate information and instruction are urgently needed, and mass communication media may constitute an obvious means to this end.

TELEAC's broadcasts should therefore aim, both in their content and in their orientation, at providing information and education in the widest sense and at reaching an audience of people who are naturally curious or interested in addition to those wishing to follow a course of scientifically sound televised instruction to make good some lack of knowledge." (3)

Some of TRU's programmes for pre-university students are also intended as general culture for graduates, eg in psychology and the social sciences. It must be admitted that it is sometimes difficult to distinguish between university, pre-university and post-university teaching, particularly when the subject is not being taught as a speciality but by way of supplementary study (eg statistics, which is of interest to medical practitioners, engineers and people in many other occupations).

Similarly, the Quadriga Funkkollegs place their courses on contemporary society, mathematics, political economy and modern linguistics in the following perspective:

"the democratic conception of equal educational chances for all, without hindrance, as a fundamental socio-political principle;

the extension and consolidation of basic and advanced education at all levels, in response to the growing ingress of the sciences into a high industrialised and promotional society;

the vital provision of study not or only inadequately coped with by our educational system for those qualified for higher education, but belonging to strata of society neglected as yet;

and the revolutionary influence of science and technology on learning habits,

present a multitude of problems and therefore create dangerous bottlenecks in our educational system which cannot be removed by conventional educational policies, curricula, teaching and learning methods, and organisations". (4)

(1) 33, p. 127.

(2) 33, p. 124.

(3) 145, p. 3.

(4) 33, p. 73.

In the light of these principles the Quadriga Funkkollegs have adopted the following aims and tasks:

"1. providing access to systematic education, also at university level, for as many people as possible;

2. facilities for proceeding from one level of the educational system to the next in the form of adequate teaching methods such as courses in background and enrichment, and transition courses (eg between A-level and university);

3. provision on a large scale of group seminars for all who follow professions involving the application of science, whose special field is subject to rapid change or who are engaged in new branches of science;

4. the preparation of study units including audio-visual media, to allow for more individualised studies less dependent on lecturers, using autodidactic materials (in the sense of 'independent study'); ideally, this requires alternating phases of correspondence study and group tuition, related to potential participants and study aims, in well balanced study units or assignments; ..." (1)

And one of the promoters of the Funkkollegs has not hesitated to assert forthrightly: "Hence the call for help to the broadcasting coporations as administrators of efficient mass media. The Quadriga Funkkollegs is but one pedagogical answer, or rather the attempt at an answer, to the socio-political situation already described. However, it differs from the group study models of individual universities in so far as they represent large-scale experiments which do bring appreciable and immediate relief in emergency situations." (2)

It is apparent that the objectives of university and post-university distant teaching systems vary greatly - from specific teaching programmes leading up to examinations, through supplementary courses or autonomous programmes to retraining and refresher courses of wide scope, imposing no obligations and offering no diplomas, as well as to operations pursuing cultural ends.

(1) 33, p. 73.

(2) 33, p. 74.

# CHAPTER II

## PUBLICS

When considering teaching at a distance a critical distinction must be made between the target public and that actually reached. The size of the latter compared with the former often provides a good test of the impact and effectiveness of this kind of teaching.

On the other hand, social and occupational analysis of these different publics must be thorough, for it often forms one of the most important and significant elements in a feed-back process leading to modification of the system.

A. Target publics

Article 2 of the Statutes of the CTEU deliberately restricts their public to "people who for various reasons are unable to follow courses at the university". Formerly, the Radio-Propédeutiques addressed themselves only to students who could prove that they were in full-time employment, sick persons and prisoners (plus, in certain areas, housewives); only these could put their names down for the courses and sit the examinations.

Certain faculties were indeed guilty of an incontestable Malthusianism at that time, being very demanding in respect to the qualifications required of all those who wished to follow distant study courses, refusing to send the accompanying documentation to intra-mural students and noting sourly that some of these tuned in to the broadcasts sometimes going as far as to record them.

At post-university level, specific CTEU programmes define ipso facto their own target publics: medical practicioners, business managers, teachers, engineers and so on.

In other cases the target public is much less well defined.

For example, as already pointed out, TELEAC aims to reach "an audience of people who are naturally curious or interested, in addition to those wishing to follow a course of scientifically sound televised instruction to make good some lack of knowledge".

This is the very opposite of the Radio-Propédeutiques. A closer analysis reveals that the actual publics reached are in fact rather different.

B. Real publics

The first thing to note is that the publics reached are always larger than the target publics.

Even at the time of the Radio-Propédeutiques certain faculties dispensing tele-teaching opened their doors not only to students for whom this method of teaching was the only one available (ie without any requirement as to regularity), but as well to those for whom such teaching was complementary to that provided by the Faculty (100% regularity not required). In the case of Strasbourg University, students in the latter category were, in 1963-64 as numerous as those in the former.

Moreover, Strasbourg University's report for that year reveals that:

"Apart from students officially registered, these courses were followed regularly by:

a. 'propédeutique' students following compulsory faculty courses who found that the broadcasts were a useful complement to these;

b. primary school teachers who, while not following 'propédeutique' courses, were studying for the professional teaching certificate qualifying them to teach in secondary modern schools;

c. persons wishing to sit the special entrance examination to the faculty (an exceptionally interesting category for which up to then nothing had been provided);

d. pupils at the Strasbourg Military School preparing to enter Coëtquidan (collective listening sessions at the school);

e. law and medical students at Strasbourg and even in Germany and Switzerland." (1)

This move in the direction of a wider public became more marked at the time of the changeover to preparing pupils for the Arts Diploma (DUEL) and of the establishment of the CTEU, responsible for (cf Article 2 mentioned above) "dispensing distant teaching ... to people who for various reasons are unable to follow courses at the university" - to which was added "and possibly also to intra-mural students".

At the University of Nancy, for example, in 1968-69 "a considerable number of students duly registered at the faculty who are neither gainfully employed nor dispensed from attending lectures nonetheless follow radio and television broadcasts, either individually or in self-constituted groups, with or without instructors. The number of pamphlets handed out to such students indicates that the latter number nearly 200, or 50% of all students following the first 2-year course. Furthermore, thanks to these broadcasts some 60 students who have already obtained their DUEL ... managed to keep up in certain subjects which are not taught by the faculty at third-year level, for example prose composition". (2)

Every report issued latterly by the CTEU stresses the fact that surveys show that the unregistered public is much larger than the registered. The former includes not only many teachers anxious to "keep up" but also many persons who follow programmes, often sending for the accompanying literature, simply to improve their own level of knowledge and culture.

2 years ago TELE-CNAM had 19,000 students in the Paris regions and 20,000 in 68 "associated" provincial centres. In its view, however, "the potential public is even more heterogeneous and widespread, extending to many persons seeking information or instruction or wanting to obtain a diploma in engineering or merely to improve their professional situations".

Post-university medical education in France, intended for doctors and broadcast on the 2nd Channel, is followed in fact by an audience at least as large of medical students and members of the para-medical professions including many male and female nurses.

The Polish Television Polytechnic considers that "a large marginal audience (averaging 170,000 people) watched the courses either occasionally or regularly. This audience can be split up into the following groups: teachers, technicians, engineers and scientists, who all watched the courses in order to refresh their knowledge or to acquire new technical know-how. In addition, there are the students and pupils of technical universities and colleges who viewed the courses in order to support their studies". (3)

Chicago City TV College stresses the importance of the non-registered audience. "The results of TV research carried out in the Chicago area show that the TV College has a large non-registered audience. These are viewers who, while switching from one channel to another, come across a TV College programme and watch it. The non-registered audience does, however, also include people whose attention is drawn to programmes of the TV College dealing with a specific subject by announcements in newspapers.

Estimates indicate that the number of viewers watching each TV lesson ranges from 10,000 to 40,000. The surveys also showed that every term approximately 25,000 people

(1) 92, p. 14.

(2) 56, p. 10.

(3) 33, p. 164.

watch the programmes within the framework of one TV course fairly regularly. All in all, that means that every term some 10 courses are watched by 250,000 regular viewers and that an estimate of 500,000 people watch the TV College programmes occasionally, but not regularly." (1)

"Marginal" publics have been the subject of interesting surveys carried out for the Quadriga Funkkollegs. To follow the courses in pedagogics, a high starting level was required and it was surmised that most students would have had a university education. A survey showed that the actual situation was as follows:

"

| Level of education | absolute figures | % |
|---|---|---|
| no reply | 22 | 0.6 |
| elementary school | 48 | 1.4 |
| German equivalent to GCE 'O-Level' | 216 | 6.2 |
| German equivalent to GCE 'A-Level' | 332 | 9.6 |
| specialised school | 226 | 6.5 |
| specialised college | 336 | 9.7 |
| teacher's training school | 1,272 | 36.8 |
| college of advanced technology | 51 | 1.4 |
| university | 567 | 16.3 |
| other level | 403 | 11.5 |
| Total | 3,473 | 100.0 |

Interpretation: The hypothesis stating that most of the participants (more than 50%) have a university background, is verified. It is nevertheless quite remarkable to note that almost 50% of the participants do not have such a high level of education but still succeeded in completing the 2 difficult terms of Funkkolleg in Pedagogy." (2)

Similarly, another survey sought to verify the hypothesis that the largest group of students would comprise teachers who had already completed their professional training, the group for whom the courses were primarily intended. Here are the results:

"

| Groups of participants | absolute numbers |
|---|---|
| A. 'Highly-talented participants' who, without having Abitur (the German equivalent to GCE 'A-Levels' in Great Britain) want to study at a university by taking the so-called 'Examination for talented persons'. These participants can, at the end of each term, acquire a certificate, 2 of which must be submitted when they register for this special examination at the education authorities. | 288 |
| B. Students of other university faculties who, as a kind of 'general study', want to deal with pedagogics for reasons of special interest, regardless of the primary subject they are studying. Successful candidates may, after having passed the final examination, be awarded a pro-seminar certificate. | 235 |
| C. Teachers at elementary schools, secondary schools, grammar schools, and vocational schools who have passed the 2 qualifying examinations for teachers, are now working in their profession, and who want to take part in refresher studies. The certificates these teachers acquire are to be included in the files of the responsible school and education authority with the instructions to take these participants into due consideration in the case of promotion, and to assist them in their further professional career. | 1,542 |

(1) 33, p. 231.

(2) 33, p. 98.

(cont'd)

D. Trainee teachers at schools of general education of all kinds and levels, who have passed their first qualifying examination. For these teachers, Funkkolleg in Pedagogy is a general pedagogic section in the second phase of their training, which supplements and intensifies their preparatory work. Here, too, instructions are to be given stating that this intensification of studies is to be taken into consideration, showing the efforts the Kolleg participants have made prior to their second qualifying examination, and allowance is also to be made herefor in the theoretical part of this second examination. 508

E. Persons working in adult education or youth welfare, social workers, training directors, and training staff in industry and commerce, persons in charge of educational duties with the police force or the armed forces, and also other persons interested in educational matters, such as parents, nursery staff, youth personnel at boarding schools etc. 977

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Total 3,492

Explanatory note: 19 examinees who sat for the examinations at a later date are included in this number.

Interpretation: Although the hypothesis stating that most of the participants are teachers conducting refresher studies after having passed both of the qualifying examinations for teachers is verified, it is nevertheless remarkable to note that the next largest group took part in Funkkolleg in Pedagogy due to a private and not absolutely professional desire for information. We are glad to say that the 288 participants in group A were offered an educational facility in this way, which would not have been available to them without such a possibility of remote study." (1)

In the mathematics Funkkolleg 53% of participants were teachers, 12% students in higher education, 12% students in further education (not counting teachers) and 3% students wishing to obtain the certificate entitling them to sit the examination for gifted students which confers admission to the university.

In all 3 cases the "marginal" public on which it is possible to check is sizeable compared with the target public. How large is the marginal public on which no check is possible because it does not register nor give any sign of its existence, but which nonetheless follows the broadcasts in whole or in part? And what about the potential public which would emerge if it were better informed?

C. Universities or institutions responsible for tele-teaching are open to ever larger publics

The emphasis has shifted from restricted categories of students.

UNED is open to all who satisfy the following conditions:

- they must have a keen desire to study and be capable of sustained effort;

- they must be able to devote sufficient time to their studies (at least 10 hours each week);

- they must have a suitable place where they can study intensively at set times. (2)

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(1) 33, p. 99.

(2) 181, p. 13.

However, candidates for admission have to sit a series of examinations designed to assess their aptitude for university education. These include:

- a reasoning test;

- a vocabulary test;

- translation from a foreign language;

- a written test of the candidate's literary or scientific knowledge;

- a commentary on a literary or scientific text designed to reveal intellectual aptitudes, ability to simplify, analyse, synthesise, amplify and criticise. (1)

The Open University is yet more liberal. The British university system is characterised by an extremely strict and selective admissions policy. This concept is rejected by the Open University, which demands no preliminary academic qualifications whatsoever. Its only criteria for admission are:

"Are you sufficiently prepared to benefit from and succeed in your proposed studies at degree level?

Is there a particular need for improved educational standards in your occupational group?

Is the course you wish to follow one in which we can provide adequate tutorial help?

Did you apply early or late in the list of applicants?

When we have considered all applications in the light of the answers to the first 3 questions - and these will be used only to a limited extent in determining acceptance - we shall accept applicants on the basis of first come first served." (2)

D. How the publics are made up

Analysis of publics by social class, age and sex reveals that distant study systems at university and post-university level open up new possibilities to very large sections of the population that otherwise would have no possibility of pursuing studies at this level.

1. A social and occupational analysis

An analysis undertaken in 1963-64 of students following the Radio-Propédeutique courses then given for the first time by Bordeaux University showed the following breakdown among viewers in the metropolitan area:

| | |
|---|---|
| Boarding school teachers | 129 |
| Day school teachers | 94 |
| Assistant teachers | 37 |
| Primary school teachers | 119 |
| Wage-earners | 16 |
| Students (various) | 39 |
| Sick persons | 15 |
| Pregnant women | 6 |
| Armed forces | 21 |
| Miscellaneous | 22 |
| | 498 |

(1) 182, p. 8.

(2) 117, p. 93.

5 years later the Caen CTEU published the following statistics on its students:

| | |
|---|---|
| Primary school teachers | 30% |
| Monitors | 40% |
| Teachers in non-State schools | 20% |
| Miscellaneous (invalids, nursing mothers etc) | 10% |

These 2 sets of statistics show that the public following distant study courses is, from the social point of view, of great interest. By and large it comprises what has been called the "university proletariat": primary school teachers, monitors, junior teachers or teachers without fixed jobs, all looking for a better or more secure situation and a higher place in the hierarchy. Surveys carried out by the universities have made it clear that these people would never have attended, or returned to, the "normal" university. The university had to come to them in their homes. For them it was indeed the "university of the last chance".

This is confirmed by studies carried out by the Audio-Visual Centre of the Ecole Normale Supérieure at Saint-Cloud on the public of TELE-CNAM.

A survey conducted in 1963-64 on the courses in radio-electricity and physics gave the following results:

| Occupation | Total 151 = 100% | Course: Radio-electricity 94 = 100% | Course: Physics 57 = 100% |
|---|---|---|---|
| Engineers | 3% | 4.5% | 2% |
| Technicians | 6.5% | 3% | 12% |
| Technical assistants | 67% | 82% | 42% |
| Draughtsmen | 6% | 1% | 14% |
| Miscellaneous | 16% | 8.5% | 28% |
| No reply | 1.5% | 1% | 2% |

Technical assistants, draughtsmen and technicians form the bulk of students. All of these fall into the category of persons who, were there no CNAM, would never have undertaken technical studies at the higher level.

A further survey undertaken in the same year and aimed at finding out what kind of school had been last attended by students following the courses in intermediate mathematics gave the following results:

| Last school attended | Total 58 | Total 100% |
|---|---|---|
| Technical school | 17 | 29% |
| Vocational school | 11 | 19% |
| Evening classes | 7 | 12% |
| Grammar school | 7 | 12% |
| Technical college | 6 | 10.5% |
| Technical upper secondary school | 4 | 7% |
| Private tuition | 3 | 5% |
| Fee-paying secondary school | 2 | 3.5% |
| Teachers' training college | 1 | 2% |

These figures show that less than 30% of the students had completed secondary studies giving them admission to higher education. For 70% the new-style tele-teaching had represented a safety-ladder and a sure means of social and occupational

advancement. Distant teaching is thus an effective means of democratising education.

Statistics on TELE-CNAM's course in fundamental data-processing (1967-68) confirm this:

| Occupation | |
|---|---|
| Technicians | 10% |
| Senior technicians etc | 8% |
| Engineers and technical managers | 29% |
| Wage-earners | 3.5% |
| Senior administrative staff | 8.5% |
| Intermediate administrative staff | 10% |
| Miscellaneous | 8% |
| No reply | 23% |
| | 100% |

Overall, the social and occupational categories are much more heterogeneous than in the case of normal university studies.

The fact is even more apparent from the following table showing the breakdown by occupation of persons following CNAM's courses in mathematics and radio-electricity in 1966-67:

| Occupation | Individual viewers per cent | Group viewers per cent |
|---|---|---|
| Retired persons | 4 | 2 |
| Students | 15 | 5 |
| Teachers | 12 | 3 |
| Skilled workers | 2 | 0 |
| Technicians | 27 | 60 |
| Foremen | 14 | 21 |
| Engineers | 16 | 2 |
| Managerial staff | 2 | 0 |
| Professions | 1 | 0 |
| Artisans, farmers, tradespeople | 4 | 2 |
| No reply | 3 | 5 |
| Total | 1,000 | 1,000 |

2. Analysis by age

This also has some interesting features.

As early as 1963-64 Caen University noted that the public following its Radio-Propédeutique courses:

a. included a high proportion of married people: men: 59%, women: 36%;

b. was old compared with the average student: men: 25 years, 6 months, women: 22 years, 7 months;

c. consisted of students who, on average, had ended their secondary school studies 3½ years before (less than one year before: 16.28%; one year: 17.64%; 2 years: 21.17%; more than 20 years: 0.9%).

Thus, this type of teaching has brought back into the university circuit a whole mass of people who otherwise would have renounced higher education. It therefore plays a role in social advancement and the democratisation of education.

From the survey conducted in 1966-67 by the Audio-Visual Centre of the Ecole Normale Supérieure at Saint-Cloud among persons following CNAM courses, either on their own or in reception centres, it emerges that 55% attending reception centres are aged between 18 and 25, while 58% of persons studying individually are between 26 and 45. Individual viewers are thus older on average than those attending group sessions. This fact appears significant and tends to show that many people who have no desire to return to the university, even to follow instruction in small groups, wish nonetheless to pursue higher studies on their own. Distant study systems greatly extend the self-imposed age-limit for persons beginning or continuing their studies.

The following table (1) showing the age-distribution of participants at the pedagogical Funkkolleg also brings this out clearly:

| " Age | No reply | Male | Female |
|---|---|---|---|
| No reply | 2 | 36 | 17 |
| 16 - 20 years | - | 14 | 13 |
| 21 - 25 years | 1 | 145 | 139 |
| 26 - 30 years | 1 | 614 | 380 |
| 31 - 35 years | - | 614 | 312 |
| 36 - 40 years | - | 318 | 159 |
| 41 - 45 years | 2 | 213 | 121 |
| 46 - 50 years | - | 122 | 97 |
| 51 - 55 years | - | 42 | 36 |
| 56 - 60 years | 1 | 33 | 24 |
| Over 60 | 1 | 8 | 8 |
| Total | 8 | 2,159 | 1,306 " |

Just like individual viewers of CNAM's programmes, the great majority of participants are aged between 26 and 45.

At Chicago City TV College, whereas two thirds of "normal" students attending college in the town are between 20 and 40 years old, only one third of "distant students" fall into this age-group. About 45% are in their forties or fifties.

Teaching at a distance hence appears to be incontestably the ideal instrument for permanent training at all ages.

3. Analysis by sex

Statistics on the Radio-Propédeutiques point to a higher proportion of women than among "normal" students. The explanation given is that working women, housewives who remain at home for the sake of their children, and pregnant women, start or take up again certain studies which they could not pursue otherwise.

A similar survey carried out by the pedagogical Funkkolleg leads to analogous conclusions:

"Hypothesis: If one proceeds from the male/female breakdown in Funkkolleg model I, about 77% of the participants should be male, and 23% female.

| Participants | Absolute numbers | % |
|---|---|---|
| Male | 2,159 | 62.17 |
| Female | 1,306 | 37.60 |
| No comment | 8 | 0.23 |
| | 3,473 | 100.00 |

(1) 33, p. 97.

Explanatory note: this chart ... (does) not include the examinees having taken the examination at a later date.

Interpretation: the relatively large number of female participants is very interesting to note, not only in comparison with Funkkolleg I, but also in view of the number of female teachers in the overall teaching staff throughout Germany, which is about 33%. This high percentage probably results from the fact that some of the female participants come from social professions or, in their position as mothers, take special interest in questions of education." (1)

At the Chicago City TV College nearly three quarters of those participating are women.

Distant study is thus a means of emancipation for women. While continuing to perform their natural functions, particularly as mothers, they can nonetheless pursue high-level studies.

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(1) 33, pp. 96-7.

# CHAPTER III

## STATUTES
## AND
## REGULATIONS

The statutes and regulations governing the bodies responsible for distant studies at university and post-university level are very varied. They are designed to meet different national and university circumstances; they thus demonstrate the degree of flexibility inherent in distant study systems and point to an attempt to match new aims with new methods.

By and large there are 4 different kinds of statute. Most frequently the body concerned is dependent on a university, either one already in existence with a department specialising in teaching at a distance or one especially set up for distant study purposes, or perhaps a group of universities joining their forces in this field. In some cases distant study falls within the competence of a specially appointed committee responsible to the Ministry of Education. On occasion it has been found appropriate to set up an association bringing together a certain number of partners in a joint undertaking. Finally, examples exist of distant study systems established on the initiative of broadcasting and television companies, which call in the help of universities or institutes of higher education.

A. University statutes

These may be divided into 3 categories depending on whether they cover:

- a centre or institute inside a university or higher educational establishment;

- a university concerned exclusively with distant study;

- a group of centres or universities.

1. Distant study institutes forming part of a university or of an institution of higher education

The French CTEU are a good example of this type of body. Each of these Centres is part of a university, namely that part whose special task it is to look after tele-teaching for one or more Teaching and Research Units. Before the higher educational reforms of 1968, the CTEU operated primarily for the Arts and Humanities Faculties.

The statutes of these Centres are comparable with those of university institutes. For example, the Dijon Centre is administered by a Council and headed by a Director. The Council is composed of 13 members who are intended to represent the key sections of the university concerned by the Centre's activities:

"- Ex officio members:

- The President of the University or his representative;

- 6 members elected by the University Council;

- 3 members of the teaching staff chosen by the teachers on the University Council;

- 3 students chosen by the student members of the University Council.

Teachers and students thus elected need not themselves be members of the University Council. In particular, the students should be chosen from among those registered at the Centre, while the representatives of the teaching staff should preferably be chosen from those lending their services to the Centre;

- 3 members elected by the 3 categories of staff - teaching, administrative and technical - attached to the CTEU;

- 2 outside persons chosen by the other members of the Council for their special competence in televised instruction.

The Director of the CTEU, or his representative, shall attend meetings of the Administrative Council."

All the other French university distant study centres have similar statutes, whether the instruction given is in the arts or, as in the case of the Economics Faculty of the Grenoble Social Sciences University, in law.

TELE-CNAM may be classed with these university institutes or centres, since it forms part of a higher educational establishment whose main audience consists of intra-mural students following conventional courses, but which has also set up a special distant study unit for certain categories of students.

2. Universities set up specifically for distant study

By far the most important of these is the British Open University, started in 1971.

The Open University is a university in the full sense set up from scratch at a ceremony held on 23 July 1969 at the Royal Society in London, at which the university was formally presented with a Royal Charter. The first Chancellor, Vice-Chancellor, Treasurer and Secretary were appointed at the same time.

Under its Statute, this university, in common with other British universities, has 2 main governing bodies, the Council and the Senate.

The Council is the university's executive body. It has responsibility for all matters, especially finance. Its members are drawn from both inside and outside the university (and include representatives from the BBC). The Council's very wide powers include the making of statutes, the creation of posts, the institution of degrees, administrative organisation, the fixing of salaries, and financial management.

The Senate consists of full-time and part-time teachers and is responsible for the organisation and supervision of studies and the award of degrees. It submits proposals to the Council regarding academic appointments and the institution of degrees.

A detailed account of the functions of these 2 bodies is given in Appendix II A.

Advisory committees are set up as and when needed. The first to be created were:

Advisory Committee on Adults and Higher Education,
Advisory Committee on Publishing,
Advisory Committee on Services Education,
Advisory Committee on Students' Library Services,
Advisory Committee on Studies in Education,
Advisory Committee on Wales,
Liaison Committee with the Disabled,
Local Authorities' Liaison Committee.

The University Council comprises 39 members whereas by the end of 1970 the Senate already numbered 150. A study group was therefore set up to reconsider the structure and operation of the Senate and the above-mentioned committees.

To ensure liaison between the Senate and the Council, the 2 bodies responsible for the government of the university, the following organs have been created: the Vice-Chancellor's Committee, which can take decisions in emergencies, and the Planning Board, responsible for long-term planning and the allocation of the budget.

Mention should here be made of the great importance of the agreement concluded under its Statute between the new Open University and the British Broadcasting Corporation. For several years before the Open University began to operate, its relations with the BBC were the subject of long discussions between the Corporation and the Planning Board.

The Statutes of the Open University also provide for general assemblies comprising representatives of the regional assemblies to which teachers and students in the various parts of the United Kingdom belong.

The decree by which UNED was established stipulates that "UNED shall be administered in accordance with the provisions of the General Education Act, in accordance with the present decree, and in accordance with its own statutes, which shall be drawn up by the Vice-Chancellor and the Preparatory Committee (Comision Gestora) after consultation with the Board of Governors (el Patronato), and approved in the form provided for in section 76.1 of the General Act". (1)

It is stipulated that UNED's statutes shall lay down the powers of the different bodies, together with their composition and the manner in which their members are appointed, subject to compliance with the provisions of the General Act.

The decree of 18 August 1972 itself defines UNED's aims, conditions for admission thereto, the broad outlines of its general structure (both central and regional), the composition of its teaching staff and forms of co-operation with other universities.

The text of this decree is set out in Appendix II B.

According to the conclusions of the Preparatory Committee, Japan's projected University of the Air seems also likely to take the form of a special university for distant study. (The Preparatory Committee was set up in May 1969 by the Ministry of Education in conjunction with the Ministry for Posts and Telecommunications.) Again the trend is to establish a university proper having a teaching programme consistent with university legislation. It will be a public institution but it has yet to be decided whether it will have the status of a State university or should have its own legal personality. In any event it should be an independent university organising correspondence courses and making maximum use of the potential of radio and television.

Another interesting idea occurs in this report. The committee, while demanding the establishment of a new university, expresses the hope that it may be given the status of a public utility. In that case its legal form should be different from those of the existing universities.

3. Distant teaching provided by a group of several universities or university centres

5 University Centres for Televised Instruction (CTEU) were set up in the East of France during the years 1963-67. The model taken was that of Dijon, whose statute has been examined above. Since 1968 the Centres have divided up their work as follows:

Modern literature (DUEL, licence, maîtrise), DIJON;
English (DUEL, licence), NANCY;
German (DUEL, licence), STRASBOURG;
History (DUEL, licence), BESANÇON;
Philosophy (DUEL, licence, maîtrise), RHEIMS.

This division of work is not final and the principle of rotation has been affirmed by mutual agreement by the Presidents of the universities concerned. The Eastern universities group is unusual in that all students in the East of France who wish to pursue one of the above branches of study apply to the university specialising in that particular branch. This constitutes a fundamental change from traditional university regulations, each centre being at the service not only of the

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students of its own university but of those throughout Eastern France. Co-ordinating bodies meet periodically to harmonise the work of the various universities.

The Ministry of Education, wishing to encourage university co-operation in televised instruction, has drawn up a draft agreement (Statute) between universities.

The agreement provides for the creation of a department common to a number of universities and university centres; for this purpose, the latter pool the equipment, materials, staff and funds available to them for tele-teaching.

The department (CTEU) provides distant education at university level, but is also engaged in permanent education. It carried out research and helps to develop modern methods and media in the universities involved.

The CTEU is administered by a council and managed by a director. The council comprises ex officio members, elected members and persons from outside. The functions of the director, who is appointed for 3 years, are carefully laid down in the agreement, together with arrangements for the allocation of funds to university at which the CTEU is situated.

The text of the agreement (CTEU Statute) is reproduced in Appendix II C.

It has seemed useful to give details of this statute since in France the trend is towards federations of universities around inter-university centres rather than towards a national university for distant studies. This model may be of interest to other countries which prefer such a system of inter-university co-operation to the setting-up of a specialised national university.

Similarly, the Paris Universities' Audio-Visual Law Centre provides first-year law courses, and will soon cover the second year too, for all students who so wish, with the help of Teaching and Research Units belonging to many universities in the Paris region.

The Chicago City TV College: after a 3-year experimental period financed by the Ford Foundation, a permanent institution was set up in 1964 as an integral part of the Chicago City Colleges, with its own budget. Its statutes well demonstrate the way in which this Television College serves the 7 Chicago City Colleges.

"The City Colleges of Chicago are under the supervision of a Chancellor, who is directly responsible to the Board of Trustees of Junior College District No. 508, County of Cook and State of Illinois. TV College, the open-circuit television extension of the entire college, is an integral part of this system. The television courses are also used for teaching regular students at the 7 individual colleges whenever colleges request them. Potential students, who want to participate in the TV College, have to enrol personally at one of the 7 colleges and are registered as students of these local institutions throughout the entire course of their studies. Students having already participated in more than 5 courses can also enrol by mail.

In principle, there are 2 ways of participating in the TV College programmes, and so there are accordingly 2 different groups of students, varying both in motivation and in time spent for studying:

a. the credit students, ie students wanting to reach the degree of an Associate of Arts by participating in the courses and taking the examinations, and

b. the non-credit students, ie students participating in the courses informally without taking any examinations." (1)

"In operating the TV College the City Colleges of Chicago co-operate with the Chicago Educational Broadcasting Association. Station WTTW, operated by this

(1) 33, p. 222.

association, broadcasts the courses on Channel 11. Whereas the programmes are conceived and designed by the City Colleges of Chicago, production is a joint undertaking of both organisations." (1)

B. Ministerial regulations

In some countries it is the Ministry of Education which has set up the distant study organisation and is directly responsible for it in one form or another. This is especially the case in Sweden and Poland.

In Sweden, the Committee for Television and Radio in Education (TRU) was set up in February 1967 by the Ministry of Education. It is responsible for studying the use of radio and television at all educational levels and for planning and carrying out experiments in this field. It is made up of qualified representatives of the university and school authorities and adult education associations. It is probable that eventually TRU's status will no longer be that of a committee. A new statute is being worked out at the moment.

Agreements have been reached with Swedish Radio and Television for the broadcasting of certain of TRU's programmes.

Poland's Television Polytechnic (Politechnika Telewizywia) is run on rather different lines. It owes its existence to the joint efforts of the Ministry of Education and the State Committee for Broadcasting and Television. As in many other countries, the Ministry of Education is responsible for the subject matter, the accompanying textbooks and the organisation of the reception centres. The State Committee looks after the production and transmission of the television part of the course.

General co-ordination is ensured on behalf of the Ministry of Education by the Commissioner for the Use of Television in Higher Education. He is assisted by a committee of 12 comprising representatives of the departments of the Ministry involved in the project, university professors, especially those with experience in adult education, and persons from television. This committee serves the Commissioner and the Ministry in an advisory capacity. It has a permanent secretary and is competent for all matters relating to the use of television in technical education.

Specialised groups have been formed within the committee, with the task of examining programmes, subject-matter and pedagogic progressions. They also recommend the names of lecturers and specialists whose aid should be sought.

C. Associations

Given the need, in the interests of efficiency, for a certain flexibility in university distant study systems, it has been thought preferable in certain cases to set up an association which can call upon the vital forces of a university without being bound by the strict rules of university administration and organisation. This system has been favoured especially for operations concerned with post-university and permanent education.

An Association for the Development of Continued Medical Education was set up in France in 1968 with the aim of promoting post-graduate medical education by all methods, in particular by sound broadcasting, audio-visual means and television.

This Association has taken over the work carried out jointly since 1963 by the Ministries of Education and of Public Health. It was thought by those concerned that an association offered the best formula both for flexibility and for effectiveness. The statutes of the Association indeed betray its origins, for according to Article 5 it is to be administered by a Council of 20 members, of whom 8 are nominated (2 by the

(1) 33, p. 221.

Ministry of Education, 2 by the Ministry of Health and Social Security, 2 by the National Medical Council and 2 by the most representative medical unions). There are in addition 12 elected members - 6 elected by one or several teachers' colleges belonging to the Association (university lecturers, class II hospital doctors etc) and 6 by the members of the Association individually.

The Association's General Assembly meets at least once a year. The Association's chief officers are a president, general secretary and treasurer.

The Association also has the help of a Scientific Council on which Medical Faculties and the government authorities concerned are represented.

The Télé-Promotion Cadres Entreprises (TPCE), which operates in the West of France and covers 12 départements of Lower Normandy, Brittany and the Loire Valley, comes under the responsibility of the Association for Social Advancement in Brittany (ADPSEB), with which the Ministry of Education and the then Ministry of Planning concluded a convention.

On the governing bodies of the Association are represented the Law and Economics Faculties, professional associations, trade unions and the supporting ministries.

The Association for Distant Studies which is being set up in the Federal Republic of Germany merits particular study, not only because the procedure followed has special significance but also because in the near future the Association will be responsible for a large-scale system of university and post-university education. Moreover, it is probable that the statute drawn up will be a source of inspiration for a number of countries, as others have followed the example of Britain's Open University.

A conference of Ministers of Education of the various Länder, at a meeting held on 7 November 1969, invited the representatives of 64 institutions of higher education to set up a committee. Another conference of Ministers decided on 27 and 28 November 1969 to set up a Fernstudium im Medienverbund (multi-media distant study) committee. It was agreed that this committee should submit its report on 30 June 1970. Between November 1969 and June 1970 there were frequent meetings of the committee and of 3 sub-committees appointed to deal respectively with organisation, the determination of development priorities and students.

It is worth analysing the statutory recommendations which were put forward with virtual unanimity in the final report. The Association is to concern itself with developing distant studies at all levels, from Erststudium to Kontaktstudium, in other words from first-year university level to advanced continued training. The report rejects the idea of founding a separate university or an inter-faculty institute. It considers that by this means institutionalised collaboration between all the universities would not be possible and students would not be able to make their own combinations of direct and distant study. The need therefore arises for an association of all concerned, in order that effective collaboration may be achieved between the Federation and the Länder, the universities and radio and television organisations. It is thus thought preferable to set up an association having the legal status of a public law institution, with organs of varying compositions and a distribution of duties and powers.

The report underlines the need to protect the right of universities and broadcasting companies to participate. As a result the statutes are to provide for collaboration and full participation by them.

One principle is repeatedly stressed: the autonomy of the universities must remain intact, and all that is necessary is to reallocate the prerogatives of the member universities and of the Association.

In pursuit of these aims, the committee has drafted an agreement, on the basis of which it has asked all the institutions concerned to enter into negotiations.

It is of particular interest to examine the nature of the principal organs of the Association as described in paragraphs 2-8 of the Agreement.

The Assembly, to which each participating university sends 2 delegates, makes statutes and selects the members of the Senate, to which it submits proposals.

The Senate, whose members are elected by the Assembly, is responsible for planning, research and implementation. It draws up the budget and internal regulations, and appoints the director of administration and the senior staff.

The President, who is elected for a term of at least 5 years, directs the Association, prepares Senate decisions and sees that they are implemented. He represents the Association.

The President is assisted by the Praesidium.

The Kuratorium, comprising representatives of the Federation, the Länder, broadcasting stations and supra-regional university associations, approves the Association's statute, fixes its budget, submits proposals to the Senate and exercises statutory supervision over the other bodies.

The tasks of managing the Association are shared by:

- a research and development centre,
- specialised committees,
- working parties set up to prepare specific projects.

The text of the Association's statute is given in Appendix II D.

The Quadriga Funkkollegs have already been in operation for some years in the German Federal Republic, and present a complex type of association involving divers partners.

It is worth recalling the general outline of the organisation of the Quadriga Funkkollegs since to a large extent this provided the starting-point for the Association for Distant Studies described above.

5 partners appear in the statutes of the Quadriga Funkkollegs:

"1. the 4 South-West German broadcasting corporations:
Hessischer Rundfunk, Saarländischer Rundfunk, Süddeutscher Rundfunk, and Südwestfunk in association with Radio Bremen;

2. the German Institute for Remote Studies at Tübingen University (Deutsches Institut für Fernstudien (DIFF));

3. the Associations of Volkshochschulen (Open Colleges) of Baden-Württemberg, Hessen, Rheinland-Pfalz, Saarland and the Land Bremen;

4. the Ministries of Education of the Länder Baden-Württemberg, Hessen, Rheinland-Pfalz, and the Bremen Senator for Cultural Affairs;

5. representatives of the academic institutions of the Federal German Länder, whose inclusion is subject to further negotiation." (1)

Co-operation is organised as follows:

"The major principle of co-operation between partners of such variety is a well-defined allocation of responsibility, functions and costs, coupled with safeguards for the required planning and co-ordinating work.

As to the division of work, the broadcasting corporations will be responsible for the programmes, the German Institute for Remote Studies (DIFF) for the printed study material, the Volkshochschulen for accompanying group studies, and the Ministries of Education for examinations.

(1) 33, p. 74.

The supreme administrative body is the Planning Committee; the above-mentioned partners are represented in the committee with equal rights. The Planning Committee chooses new subjects for the Quadriga scheme and deals with organisation and publicity; it examines the curricula (study aims, subjects etc) developed by working committees, and discusses, or approves, their overall lay-out. Special sub-committees of the Planning Committee, such as the Board of Certification and Examination, take charge of particular projects, in which certain partners may have greater powers, depending on the division of work ...." (1)

Oddly enough, it is with the universities that the difficulties have been greatest, which doubtless explains why so much care has been given to the organisation of university participation in the distant study Association at present being set up.

"Attempts to encourage their participation /by academic bodies/ 'qua institution' succeeded in the case of 2 Funkkolleg projects, but failed in the others. Fresh efforts must be made with each new course; also to be decided is the role universities are to play in the Planning Committee - a role which must take into account bodies represented in the universities, and which must be compatible with the efficiency of the Planning Committee (limited membership)." (2)

D. Radio and television organisations

Throughout the world, various complete study systems in secondary education have been set on foot by radio and television organisations and are managed by them. This is particularly the case with the Federal Republic's Tele-Kolleg, which gives courses at secondary education level. The Tele-Kolleg is run by the Bavarian Radio and Television Organisation under a contract with the Bavarian State.

Similarly Tele-scuola, in Italy, was a branch of the Italian Broadcasting Organisation (RAI). In Japan, the Broadcast Correspondence High School is an offshoot of the national television organisation (NHK).

However, the NHK Correspondence High School has its own statute, which may be summarised as follows:

"The NHK Correspondence High School was established as a juridical person, independent from NHK itself. Therefore the school, rather than NHK, is in charge of the correspondence courses; and NHK is in charge of the broadcasts which are designed to accompany correspondence study. These broadcasts are not limited to the students of the NHK Correspondence School, and indeed are used by students of all correspondence schools in Japan. However, they are an essential part of the NHK school curriculum. Unlike most instructional television throughout the world, these broadcasts are considered not as supplementary but as essential to the course; the correspondence students in effect attend class by listening to or viewing the NHK programmes. The school was designed to serve as a pilot project in the combination of broadcasts with correspondence study, to establish models for programme utilisation, and to collect data for programme improvement. Therefore, although there is no control by NHK over the school, the relationship remains very close." (3)

It has seemed worthwhile to give a brief account of the statute of NHK's secondary educational service, since this radio and television organisation is now planning to set up a "university of the air" on a similar basis: this is a rival project to that of the committee appointed by the Ministry of Education.

In Europe TELEAC is the only distant study system (partially at higher education level) subject to a radio and television organisation. TELEAC was established by an Act of 10 December 1963. The initiative for this foundation was taken by the

(1) 33, pp. 74-5.

(2) 33, p. 75.

(3) 33, p. 208.

Dutch Society for Trade and Industry, which appointed a committee to examine the possibilities of educational television in the Netherlands. The statute provides for a Governing Board, which in its management is assisted by an Advisory Committee.

A great number of institutions, particularly active in the scientific and social spheres, are represented on this committee. Another committee is more especially responsible for programmes. The committees are divided up into specialised working parties, each having particular responsibility for producing one or another study course.

"In 1964, discussions held with the Minister of Education, Arts and Science led to the suggestion to negotiate with Nederlandse Omroep Stichting (Dutch Broadcasting Foundation, NOS) on the co-operation needed for solving the technical problems involved in the project, and an agreement was concluded in September 1964.

The following decisions were made in this agreement:

- TELEAC is to assume the responsibility for the planning and the contents of the projects;

- NOS is to be represented in the programme committee of TELEAC which, subject to the final decision to be made by the administration department of TELEAC, is authorised to approve of or amend the suggestions made for the courses;

- the technical staff (including the director) is to be made up of employees of NOS;

- the courses are to be presented by NOS in co-operation with TELEAC.

A unique aspect was that TELEAC was provided with a studio of its own in Delft. This was done for various reasons, one of them being the possible co-operation with the technical college in that town.

Pursuant to paragraph 10 of Dutch broadcasting law, the broadcasting time for TELEAC's working programme was made available to NOS. Following a change of the Cabinet, the Ministry of Education, Arts and Science was split up in 1966 to form the Ministry of Education and Science and the Ministry of Cultural Affairs, Spare-Time Occupations and Social Welfare. Since that time, the Dutch Broadcasting Corporation has been under the control of the Ministry of Cultural Affairs, Spare-Time Occupations and Social Welfare (CRM)." (1)

(1) 33, p. 139.

# CHAPTER IV

## METHODS

The pedagogical methods used in distant teaching systems vary and are highly diversified. Some use only radio or television, with a few accompanying documents. Others are essentially correspondence schools which, in addition, have recourse to more modern means of communication. Yet others take advantage of all the possibilities of both traditional teaching and teaching at a distance, combining them in a single complex of methods and means which approaches the creation of a true multi-media distant study system.

Bodies established recently ab ovo to dispense distant teaching at university or post-university level thus all end up by having recourse to a whole range of pedagogical practices and procedures, including in particular:

- radio and/or television programmes;

- accompanying material, either printed or audio-visual;

- correspondence courses;

- assigning tutors to students, who also assemble on either a continual or an occasional basis;

- diversified methods of assessing the knowledge gained.

## A. Radio and/or television broadcasts

### 1. Their varying share in the educational process

In some cases these broadcasts constitute the bulk of the teaching dispensed. This is particularly true of post-university medical teaching in France, the only other course component at this time being technical notes published in medical journals. TELEAC's programmes for doctors also form the core of the teaching, even though the accompanying literature is more complete.

In many countries, such as Britain and France, which put out refresher courses and retraining programmes at post-university level for teachers, those responsible for the courses put the emphasis on the broadcasts rather than the accompanying documents, which they cannot always be sure will be read, let alone studied thoroughly.

In other systems there is more of a balance between broadcasts and correspondence courses. This is the case, for example, with the French CTEU and Chicago City TV College, whose title nonetheless points to the weight given to television:

"... The flexibility of television as a teaching medium and the permanent crisis in the structure of the general school and university system lead to the participation of a number of schools and similar institutions in the TV courses, in this way hoping to reach their specific teaching aims. The TV courses are used for the classroom teaching of regular students at the 7 local colleges of the City Colleges of Chicago and at certain teachers' training colleges in Chicago. In so doing 2 television lessons in a certain subject are supplemented by a direct lesson lasting for one hour. In principle, colleges and universities accept TV teaching as a highly important and valuable method. This method does not only permit large numbers of students to be instructed simultaneously, but also provides the students with the best teachers in every subject. Furthermore, colleges with shortages in staff and equipment can in this way offer courses with a high degree of quality, which would otherwise not be possible." (1)

TELE-CNAM's teaching is based on the combined use of television (8 hours on the 2nd Channel and 13 hours on the point-to-point network) and correspondence courses.

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(1) 33, p. 225.

Bodies which have been set up with the express intent of using multi-media systems - such as the Open University, the Funkkolleg and the proposed German VFF - have recourse to radio and television only at those specific points in the pedagogical process where their contribution is regarded as essential and irreplaceable: thus in certain disciplines these media are hardly used, whereas in others broadcasts are much more frequent. (Even at the Open University, however, which is often called a Tele-University, broadcasts account on the average for only 5% of the study-time within each course unit. They last for 24 minutes and are retransmitted once.) Again, in some disciplines only radio is used, in others only television. But most often both media are used to supplement each other, having regard to the specific contribution of each.

In the words of Chicago City TV College, "The teaching aims determine which mode of presentation is to be used for the television courses, and to what extent audio-visual teaching aids are to be used in presenting the material; for example, content courses such as history, literature, and social science, are suited especially for being presented in the form of lectures, whereas skill courses such as natural science, music, art, typing, and shorthand, must employ a substantial amount of trial demonstrations and dramatising effects in the studio, and ... necessitate a closer contact between the teacher and the students in the form of conferences, seminars, classroom exercises etc ..." (1)

Certain distant teaching systems use radio and television only in an auxiliary role. For instance, while UNILAD proposes "to offer students special summaries or extended treatments in subjects where these are needed, through television programmes lasting approximately 30 minutes" (2) - here the programmes clearly form an integral part of the study course - it also makes marginal use of television programmes for the general public, though to a degree seemingly of minor importance when set against the whole study course.

"UNILAD's students will be kept informed about televised cultural and sports programmes and will be required to send in critical reviews of those which, in the view of the Committee for Humanist Training, can usefully supplement vocational training. The total number of programmes on which these critical reviews will be required will amount to about 10 hours a year, irrespective of the subjects for which the student has registered. The student can make his choice, following his own preferences and his viewing possibilities, from among the programmes proposed by the committee." (3)

The introduction of recorded courses, film, sound and video is not due until later but UNED has been broadcasting for 5 hours a week on radio (refresher courses) and half-an-hour a week on television since its inception in January 1973 in conjunction with the Spanish radio and television authority. In addition, it recommends its students to follow various educational and cultural broadcasts intended for the general public.

Elsewhere however we read that "all programme courses will be recorded, and several of them filmed, so that students in regional centres can have access to them; and the more important courses will be broadcast by local transmitters". (4)

2. Great variation in subject-matter broadcast

The broadcasts put out by the Radio-Propédeutiques in France, each lasting some 30 minutes, fell into 3 categories:

- lectures,
- practical exercises,
- correction of homework and practical advice to help the student with his work.

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(1) 33, p. 227.

(2) 43, p. 6.

(3) 43, p. 6.

(4) 43, p. 6.

The Arts Faculty at Bordeaux, for example, used to insist that "practical exercises should form by far the largest part of the course". These practical exercises were designed as follows:

- for the courses in French: comments on and correction of essays, textual commentaries and book-reviews;

- for foreign languages: translations, prose compositions, textual commentaries, or grammar lessons;

- for history: lessons, study of documents;

- for geography: lessons, maps;

- for all subjects: reading-lists and instructional guidance.

The Pedagogical Funkkolleg's broadcasts cover a wider range:

"The individual lecture sessions, the length of which (one hour) could not be reduced for organisatory reasons, are made up of 8 methodical elements as follows:

- lectures given by a member of the team, some of which include elements for activating the participants such as instructions telling them to take notes on various models, to draw up charts etc;

- long or short quotation passages integrated into the lectures and spoken by a radio announcer, sometimes providing a contrasting change to the preceding text;

- integrated information passages, for example on a certain pedagogical trend, on the definition of terms, also spoken by a radio announcer;

- study scenes: pedagogical situation as a basis for presenting and illustrating theoretical analyses or as an illustration of the argumentation put forward beforehand;

- analysis of the study scenes by individual members of the team, or by several members simultaneously;

- statements made by individual team members on specific questions during or following a lecture;

- discussions between the team members either during or following a lecture or a statement;

- short interludes of music as a break between presentations." (1)

It is interesting to note that this list of types of programme includes programmes designed to arouse the viewer's interest and to motivate him. This is all the more important when one is dealing with isolated publics who are perhaps insufficiently responsive to the instruction offered and inadequately motivated. Yet almost all radio and television programmes at university and post-university level have up to now been put together, as regards both their contents and their presentation, as didactic programmes in the strictest sense of the term.

3. Unsatisfactory presentation and faulty adaptation to the media

All too often broadcasts are no more than lectures recorded and filmed, with scant concession made to the specific possibilities of expression offered by radio and television.

The launching, in 1963, of the pedagogical experiment of the Radio-Propédeutiques, for which there was no precedent in France, required of teaching staff a very special

(1) 33, p. 87.

effort to adapt themselves to this new relationship between teachers and taught.

Most of the teachers taking part in the operation found it difficult to adjust their teaching methods to the requirements of broadcasting. A course of radio-lectures is necessarily more condensed than a similar course held in a lecture-hall; the frequency of the programmes does not allow much attention to be given to a presentation suitable for broadcasting purposes; and their lack of experience in this unfamiliar field led the teachers not to exploit sufficiently the potentialities of radio.

Teachers had therefore to be induced gradually to abandon the monologue-style of lecture in favour of something better adapted to the new means of expression now at their disposal.

As in every educational radio programme the problem arose of the density of information. It is obvious that the preparation of courses for broadcasting calls for quite particular care. The lecturer bends all his efforts to making the utmost use of the precious, limited and costly time allotted to him. The result is often an excessively concentrated course, covering the subject-matter of several ordinary lecture-hall courses. The burden of work required for the preparation of a single half-hour broadcast will be readily appreciated: it may amount to a whole working-day, or even several ; to which must be added the recording session and the drafting of the accompanying documents.

The experience gained in the first year of operation led to a period of reflection and research on how to adapt the contents of the "message" to broadcasting conditions, teachers having now recognised the highly specific character of teaching at a distance. Depending on the disciplines, the kind of operation and the personality involved, various types and styles of presentation have emerged.

Analysis of certain programmes put out by the University of Caen is revealing in this regard:

- Philosophy course: ex cathedra presentation, uses a loud voice and firm tones, as if to quell an imaginary lecture-hall audience. Paradoxically this style goes down well because it recreates, more or less, the atmosphere of traditional courses.

- Philosophy course: chatty style. The teacher tries to make his audience react by asking them questions, exhorting them etc. A very lively programme, which gives each student the impression that it is directed to him personally.

- French course (correction of an essay): talk between 2 teachers, each criticising and contributing ideas; gradually the essay takes shape. The mental processes of the student are so to speak retraced: his dialogue with himself, his searchings, his questions.

- English course (translation): the lecturer calls in an English-language assistant. Silent periods give the student a chance to make a mental translation and hence to take a real part in the programme.

- Latin course (translation): a girl student is called in to suggest possible translations or to put certain questions agreed upon beforehand, thus acting as an intermediary between the teacher and his audience.

- German course: a student participates, with no previous rehearsal. For the lecturer this is an exercise in agility, fascinating for the viewer.

The radio programmes put out by the Radio-Universitaires often make use of music and background noise.

In television also there has been a striking development along the same lines. TELE-CNAM's first broadcasts (1963) relied on lectures delivered ex cathedra. Now its programmes on data-processing employ the full range of expressive possibilities open to television and use many extracts filmed on location or in the studio or using the caption stand.

Chicago's TV College has also devoted much thought to the form to be taken by its television programmes:

"The TV College has an annual contract governing the usage of studio facilities with WTTW, Channel 11. This station makes the broadcasting time available to the City of Chicago free of charge. The directors, the cameramen and the technical studio staff are also provided by WTTW. Despite this fact, the TV College staff includes 3 television producers who all hold an academic position within the College. These producers co-operate with the teachers when the lessons are developed and rehearsed.

Ever since 1966 the staff of the TV College has been employed with improving the methods of production. For many years most of the producers were satisfied with simply imitating the well-prepared lectures held in regular classrooms. Although there are few or even no results available based on relevant research, which might indicate in any way that the student's performance is influenced negatively by a lack of exactness and care in the production of the programmes, the TV College management is determined to do its very best to exploit the visual potential of the medium to the greatest possible extent. All the members of the staff hope to be able to deviate from the verbal mode of presentation - the talking face - which at present is used almost exclusively. Perhaps it will be possible to exploit the skills of a technical staff with the largest possible basis of training, the knowledge of experts in the fields of learning psychology, and the results of experiments examining the teaching intensity of visual dimensions." (1)

One cannot become a television teacher overnight. Teachers must volunteer, be selected and then be trained. This is Chicago's experience:

"The actual key figure at the TV College is the teacher. The College was lucky enough to gain competent teachers for its television courses. The procedure in employing the teachers is as follows: teachers are requested to send in their application for working on TV. Another possibility is to ask university chancellors or heads of faculties to make suggestions as to suitable teachers. Only a very small number of teachers were employed who are not regular members of the faculties of the City Colleges of Chicago. This is not supposed to be an absolutely rigid policy, but it is thought that the unity of the TV College as an institution can be maintained best in this way. Each teacher selected as a TV teacher for a certain course is initially requested to compile a programme lasting for about 10 minutes on a subject he is especially interested in. This programme is recorded, and discussed and explained in detail by the respective teacher and the members of the television staff when presented. Mistakes made are pointed out to the teacher, he is given advice as to correct behaviour on TV (gestures and language), and he is shown various tricks that can be used when teaching. The next step the teacher must take is to compile a 45-minute programme dealing with part of the subject-matter of the planned course. In so doing he must give special attention to the mode of presentation of the material taught and to the rhythm of the lesson, in respect to the usage of audio-visual teaching methods. The teacher will not start with the actual preparation of his course until he has successfully completed this trial programme and is fully acquainted with using television as a teaching medium.

Each teacher is granted a preparatory period of 8 weeks for each course before the first programme is recorded. His first task is to draw up a short report, in which the main teaching aims of the course are explained and discussed. This period lasting 8 weeks, devoted entirely to the conception and planning of one single course, makes it possible to formulate clearly the implicit aims of the course and to develop the mode of presentation of the material accordingly." (2)

This field calls for intensive research. The potentialities of radio and television must be exploited in the best possible way. By better adaptation of form to content, different subject-matters and types of broadcast having very different aims,

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(1) 33, p. 229.

(2) 33, pp. 226-7.

it will doubtless become possible to re-examine the whole question of the place occupied by these media in distant study systems.

B. Correspondence courses

These have 2 main components:

- the accompanying documents,
- the correction of homework.

1. Despatch of documents

These documents, which students receive throughout the year at regular intervals, are very numerous and of different kinds. They include:

- Specially prepared textbooks or multigraphed lectures. The Open University, for example, brings out a textbook for each of its basic courses, and this is sent free of charge at the beginning of the year to every registered student.

Similarly, the Chicago City TV College publishes very well-designed textbooks:

"The guide accompanying the courses contains a description of the most important studying aims, additional explanations geared to each TV programme, reading material, and exercises and information on the homework to be done on a certain topic and remitted at a certain date. Apart from this guide, the TV courses are elaborated in some cases by normal textbooks which are handed out to the students, and in a few cases by tapes and records placed at the students' disposal for their home studies.

The guide can only provide general information on the requirements of a course, as these books with about 60 to 70 pages are printed by commercial printing shops and given to the students each time a video tape recording of a course is re-broadcast. For this reason the credit students receive a credit bulletin every term, in addition to the guide. This bulletin informs the students of when and where conferences and examinations are to take place, of when the television teacher and the group teacher can be reached on the phone, and of which other requirements they must fulfil in order to complete a certain course." (1)

The CTEU generally prefer to use multigraphed texts sent out at suitable moments during the course of study and permitting any necessary adjustments.

- Written material accompanying radio and television broadcasts, whenever these play an important part in the course. The Pedagogic Funkkolleg's texts reflect a concept to which particularly exhaustive thought has been given:

"The structure of the letters accompanying the studies follows from the didactical function they are to have within the framework of the media compound and from the nature of the 'printed study material' medium as such. The nature and functions of this medium can - in brief - be classified as follows: the study letters are a printed mass media with texts and pictures. Their aim is to present visually a system of highly organised teaching material based on aspects of learning psychology, enabling students to proceed according to autodidactical methods with various aids and checking facilities. They are the main unit within the phase of individual learning and are intended to help the students to understand the Kolleg lessons better, to facilitate their follow-up work, to provide possibilities of repetition, to offer a possibility of studying at any time, to avoid the necessity of taking notes in the Kolleg lessons, to encourage discussions in the study groups, and to help the students continue their studies independently.

The printed material contains the following structural elements, making it possible to realise these functions:

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(1) 33, p. 227.

the breakdown of the Kolleg lessons;

aids for guided self-study, such as hints for solving tasks or explanatory notes on charts etc;

a clear breakdown of texts, pictures, and charts into rough and fine elements, easy to understand for the students;

a numerical system for the individual sections (according to German industrial standard DIN 1421), making rapid orientation possible;

the notes made in the wide margin, intended to direct the reader's attention to the significance of a certain passage within the overall context, such as 'initial situation', 'summary' etc;

tasks and problems for the purpose of self-control with solutions and comments provided in the appendix;

a glossary in the appendix, enabling students to look up important terms;

bibliographical notes on fundamental and further literature;

suggestions for the work done in the study groups." (1)

- Selective reading lists of set books or recommended works. The Open University has striven to make these works available to its students by various means:

"Courses involve the use to 2 groups of books - set books and those recommended for background reading.

Essential reading is contained in the correspondence material from the university, and also in a small number of set books which students will be expected to buy for themselves. These books will be needed throughout the courses. Many have been made available at a reduced price, by agreement between the publishers and the Open University, and will be kept in print for the duration of the courses. Special arrangements are being made with booksellers to ensure that the set books are kept in stock. Registered students will receive lists before courses begin so that they may purchase the books in good time, and advice on how to obtain these if experiencing difficulty.

Students may also be interested in reading further about some of the topics covered in their courses. Lists of books recommended for background reading will be included in the correspondence material. These lists will also be published in advance for the information of librarians.

Books for background reading may be available in public libraries and also in some other local libraries. Students should enquire locally in order to find out what provision is being made for Open University students." (2)

- Equipment. The Open University lends its science students kits enabling them to carry out simple scientific experiments at home:

"In the Science and Technology Foundation Courses and in some of the higher level courses in these faculties the course teams have designed home experimental kits which are sent to the student at the beginning of the year. The science kits include a microscope, a balance, a photometer, a stopwatch, chemicals and reagents, among other things, and the student is asked, in the correspondence text, to carry out one or more home experiments each week. In many cases these experiments are closely integrated with the television broadcast, eg the broadcast may illustrate the experiment, perform a more complex version of it, or be used to illustrate an elaborate experiment,

(1) 33, p. 90.

(2) 117, p. 25.

the results of which the student can write up for himself." (1)

UNED also proposes to lend similar kits to its students.

- Printed material and audio-visual aids bearing on all or part of the study course.

It may be noted that the proportion of audio-visual material - photographs, recordings, tapes etc - is tending to increase. Especially they seem to be favoured when, as in modern language courses, supplementary oral material is needed, often forming the basis of exercises. As more and more homes come to possess appropriate equipment, recourse to audio-visual material will grow.

The National Tele-teaching Centre at Vanves, which contributes to certain French distant study courses at higher educational level, has defined as follows the nature and aim of the audio-visual material which it sends out to students:

"Whatever the medium used, our audio-oral productions are intended to back up the basic instruction contained in our written courses, by completing and illustrating these. This supporting material cannot be dissociated from the courses.

In the case of both records and magnetic tapes, these media will for the most part be used to convey what cannot be transmitted by the written word.

The purpose of this kind of aid is therefore:

- to familiarise the pupil with the spoken aspect of the language being taught at a distance, without direct supervision by the teacher (education of the ear as the receptive organ);

- to train him to reproduce the sounds and rhythms of that language correctly (education of the transmitting organ);

- to bring him to mastery of oral expression through repetition (acquisition of vocabulary and language structure) in conjunction with practice of the cadence of the language being studied." (2)

To an ever greater extent the use of such material will go beyond language teaching. Certain systems are even trying the experiment of letting the student have a simple teaching-machine in his own home and sending him the appropriate cassettes.

Some audio-visual material hardly lends itself to use at home. Students must therefore use it, either in groups or individually, in properly equipped centres. Examples are the video-tapes used in CNAM's Associated Centres or in the colleges provided, under the auspices of the Chicago City TV College, with recorded programmes by the Great Plains Instructional Library at Lincoln, Nebraska.

2. Exercises and homework

Most university distant study systems involve the regular despatch of homework and exercises which have to be returned by the student. Sometimes these take the form of conventional-type essays, sometimes of exercises in the traditional sense.

In view of the vast and ever increasing numbers of students using distant study systems, the temptation is great to rely on exercises marked by computer. In Western Europe such exercises have been thoroughly studied by the Open University and the Funkkollegs. Though borrowed from these 2 particular systems, the following observations could well be generalised:

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(1) 33, pp. 131-2.

(2) 62, p. 1.

"Essentially, 4 different types of tasks can be applied, depending on the purpose and contents of the respective problem:

- alternative answers (yes or no, right or wrong);

- simple or multiple choice answers (one or several correct answers must be marked with a cross, out of a number of possibilities provided in a certain question);

- re-arrangement or allocation tasks (several statements, data, or facts must be arranged in the correct sequence or combination, as prescribed by the respective question);

- tasks made up of a combination of the 3 types shown above.

It must also be considered that a task can be set by using words, symbols, or pictures.

In a pre-test, the tasks selected are checked as to their usability and the amount of time needed, and are possibly revised in accordance with the test results.

In principle, the tasks are to fulfil the following quality criteria: objectiveness (so that clear and correct answers can be given), stability (always the same results under the same examination conditions, independent of time and location), appropriateness (the tasks must include an essential characteristic from the catalogue of teaching aims), independence (each task must be independent of the others and evaluable in itself), clarity (clear, concrete, and comprehensible working), a suitable degree of difficulty, grading effectiveness (due to their contents and the relation thereof to the teaching aims, correct answers must be given more frequently by the good students than by the other ones).

The main purpose of such computer assistance in examinations (besides the advantage that less time is required and work can thus be rationalised) is that feedback for the learners and teachers is more exact, comprehensive, and faster. Naturally, this discussion of the examination procedure raises basic problems pertaining to examinations as such, which cannot be dealt with in this context. It should also be pointed out that the examination system applied had further advantages as compared with traditional methods, although such traditional methods can of course be justifiable within an intermediate examination system. These advantages were:

- usage of a large number of examination tasks for testing the candidate's knowledge, comprehension, application and judgement (Bloom's taxonomy) can be presented in a form evaluable by machines, so that the determination, grading and feedback of each candidate's ability is objectivated to an extent that can hardly be reached by any of the conventional procedures;

- all the examination results, the examination procedures, and the grading procedures can be verified inter-subjectively;

- computers permit the examiners to prepare and evaluate the examination more thoroughly, as they do not have the burden of having to correct work, a job which takes up a lot of time;

- the solutions given by each examinee are graded equally and impartially, without the teacher 'considering' the character of the examinee concerned." (1)

"TELE-CNAM places high hopes on the use of a computer for exercises. In the course on general data processing it was found necessary to provide a so-called correspondence system for the exercises with individual correction and statistical computer evaluation for the participants, following the successful electronic evaluation of a questionnaire conducted in 1968 and after various studies had been carried out during the examinations and a study had been conducted on behalf of Télé-Promotion Rurale. For this purpose CNAM concluded a contract with the Ecole Normale Supérieure in Saint-Cloud which initially - in the experiment phase - limited the total number of enrolments to 2,000.

(1) 33, pp. 93-4.

Apart from the advantage offered to the students in this way (who can now have their exercise work corrected), the production team hopes that it will be able to adapt the course to the participant's level of comprehension on the basis of the answers given in the exercises." (1)

Apart from homework and exercises, attention should be drawn to the existence of programmed exercise material which enables the student to evaluate his own progress as he goes along. Thus at the Chicago City TV College, in addition to the students' guide, many teachers develop exercise material based on the principles of linear programmed instruction. In general, this exercise material consists of answer-sheets with the grades for self-correction already attached, or answer-sheets with references as to the correct answers to be found in the students' guide. In this way the process of learning can be reinforced, as the student is able to find out immediately whether his answer was right or wrong. For some courses exercise material has been developed based on the so-called "branching programming method. In this case the student is referred to the passages in his guide or to certain text-books that provide him with the correct answer and the individual steps leading to the correct answer, if his solution should not be right". (2)

UNED, too, is envisaging a self-correction system of this kind. Such exercises play a large part at present, even though more extensive use is to be made of audio-visual media later. The sponsors of UNED take the view that "Printed material, cyclostyled courses, study instructions and reading guidance serve to establish a genuine dialogue between teachers and students via questions, answers, exercises, observations and comments. The advantage of this form of written communication is that, while being a stable method of communication, it can be reviewed at any time by either party (teacher or student) with a view to any necessary adjustments being made to the learning process." (3)

3. Communication by telephone

Some study systems offer with their correspondence courses the possibility of telephone conversations between teacher and pupil. At Chicago students are told at what time of the day they can telephone to their teachers and they are encouraged to do so:

"During the telephone periods the students can discuss in brief questions relating to a specific subject with their teacher. They can also arrange appointments for meeting the teacher personally for a comprehensive discussion. The main motive behind the telephone periods is to give the student a feeling of not being isolated.

Each television teacher can be reached on the phone by the students for 2 hours every week. The group teachers can be phoned almost daily." (4)

Similar arrangements for student-counsellor communication have been made at the Open University.

C. Direct contacts between teachers and students

Practically all higher education distant study systems have felt the need to offer their students - who are, by definition, isolated - the most frequent contacts possible with their instructors, the latter's assistants, other teachers and even fellow-students.

Several different formulas have been worked out:

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(1) 33, p. 128.

(2) 33, p. 202.

(3) 184, p. 6.

(4) 33, p. 229.

1. Regular return to the university

In France the Radios Universitaires require their students to come back regularly to the university for meetings which generally last one day. The rate differs from one university to another, from once a fortnight to once a term - in which case students stay longer.

These meetings are given over to:

- practical work,
- work under supervision,
- round tables of teachers and students,
- talks between students and senior teaching staff or their assistants.

2. Regional centres

CNAM has set up in France 68 "associated centres" in which students can follow televised study courses, attend supplementary courses of instruction and have direct contact with teachers and assistants.

The Open University has nearly 300 study centres within its 12 regions, each headed by a regional director:

"Study centres provide facilities for watching and listening to programmes, for group discussion and for personal interviews with counsellors. The larger study centres will, in addition, provide specialist class tuition, access to computer terminals, space for private study and informal social contact with fellow-students and staff.

Main study centres in areas which cannot receive the BBC 2 signal will be equipped with projectors and libraries of Open University television programmes. In some centres there will be computer terminals for use by students taking the mathematics courses.

Centres are usually open each weekday evening from 6.30 pm to at least 9 pm and in some cases at certain times during the weekend." (1)

In addition, provision has been made for tuition in small groups, with instruction given by various teachers, in particular by tutors:

"Tutorial classes will be arranged in selected study centres at regular intervals, either during the evening or at weekends. These will provide specialist academic tuition related to the current broadcast programmes and correspondence assignments. Students are notified of tutorial classes available in their localities or region." (2)

UNED attaches considerable importance to regional centres. This is in line with the UNILAD project, which contained the following statement:

"Regional centres are an essential element in the organisation of this distant study system:

- They are the means of ensuring horizontal contact, ie relations between the students and the possibility of forming work groups. We believe that a proper university education can never result from an exclusively student-professor relationship, but that student-student contacts are necessary not only in work but also as part of social and human relations.

- The existence of regional centres permits continuous assessment, based on precise norms.

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(1) 117, p. 22.

(2) 117, pp. 22-3.

- They make it easy to follow television programmes and, thanks to a collection of recordings, to revise past course work.

Recordings of the whole year's course will be available. Students will be able to view and listen to them outside the scheduled course hours, against payment.

Students will also be able to take out a subscription entitling them to look, also outside the scheduled course hours, at films on the subject-matter of these televised programmes.

There will be 36 regional centres, distributed in such a way that no point will be further than 75 km away from one of them.

To start with, we have chosen to allocate these centres having regard to the existence of university towns for it is there that we expect to find the greatest number of pupils. Then, for reasons both of urgency and economy, we have chosen in so far as possible towns where the Ministry of Education and Science has set up cultural centres. Lastly, towns have been selected whose geographical situation enables them to cover regions which are not yet covered." (1)

Several regional centres were ready to operate as soon as UNED was inaugurated, viz. Las Palmas (Canaries), acting as a pilot centre, Barcelona (Catalonia), Pontevedra (Galicia), Cadiz and Motril (Andalusia).

The network is to be gradually extended through the addition of provincial or even local centres according to the geographical distribution of students. This augmented network is expected to be ready in 6 years' time.

All these centres have quite specific functions, viz.:

"- supplementing tele-teaching by face-to-face teaching;

- facilitating contacts and meetings between teachers and students and among the students themselves;

- serving as a headquarters for the organisation and operation of the tutorial system;

- facilitating the use of audio-visual media in each case;

- giving students guidance on problems connected with their studies;

- carrying out individual assessment tests;

- holding special courses and meetings during the summer;

- planning and holding a series of cultural activities to supplement the students' university training." (2)

The following standards have been laid down for premises (whether new or old), according to the number of students:

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(1) 43, pp. 7-8.

(2) 11, p. 22.

| Premises | Less than 300 | | 300 to 600 | | 600 to 1,000 | |
|---|---|---|---|---|---|---|
| | No. | area ($m^2$) | No. | area | No. | area |
| Director's office | 1 | 20 | 1 | 20 | 1 | 20 |
| Administration Secretariat | 1 | 20 | 1 | 20 | 1 | 20 |
| Large halls (60 $m^2$) | 3 | 180 | 4 | 240 | 5 | 300 |
| Small halls (12 $m^2$) | 5 | 60 | 8 | 96 | 12 | 144 |
| Audio-visual equipment room | 1 | 50 | 1 | 80 | 1 | 100 |
| Library | 1 | 150 | 4 | 175 | 6 | 200 |
| Study rooms (15 $m^2$) | 3 | 45 | 1 | 60 | 1 | 90 |
| Bar | 1 | 60 | 4 | 90 | 5 | 120 |
| Services | 2 | 20 | | 40 | | 50 |
| TOTAL | | 615 $m^2$ | | 821 $m^2$ | | 1,044 $m^2$ |

That there is nothing utopian about these forecasts will be realised if it is remembered that more than 8,000 students applied for enrolment at UNED on the day it opened and that, for example, the Las Palmas centre alone already has 322 students.

3. Counsellors

The Open University has gone very far in its efforts to ensure individual contact, by setting up a team of counsellors:

"Every student will be assigned to a counsellor whose job is to guide and advise him in his studies. The counsellor will normally be available in study centres on specific evenings every week and students may ask for a personal interview once a fortnight. Arrangements will be made for counsellors to visit from time to time students who cannot attend study centres. One of the specific jobs of the counsellor is to see students towards the end of their immediate course of study to discuss the subsequent courses they might follow within the approved study schemes of the university. The counsellor will also arrange discussion groups in study centres and help with any general academic problem that may arise. If he cannot deal with a problem he will know to whom it should be referred." (1)

In addition to its organising staff, whose "basic duties are to prepare courses and texts (both programmed and non-programmed), set examinations and give guidance to students, UNED has a large number of tutors who each correspond with a specified number of students, answer their enquiries and arrange meetings and interviews at the regional centres.

Further, a student can at any time ask for a private consultation at the university, such requests invariably being granted. For this purpose he uses a special personal card. A distinction must be drawn between academic consultations and administrative consultations. Consultations can also take place by correspondence." (2)

These examples could profitably be followed by other systems. It need not even cost very much, since recourse may be had to junior university lecturers or qualified secondary school teachers, who would act as counsellors in return for an allowance. In this manner the operation would be "geared down" to local level.

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(1) 43, pp. 7-8.

(2) 181, pp. 19-20.

4. Summer schools

Certain systems take advantage of holidays, when students following distant study courses have time off and university premises are unoccupied.

The Open University's experience in this regard proved conclusive as from its very first year of existence:

"Each foundation course includes a summer school which lasts one week. This provides an intensive period of study in a different kind of learning situation. For this reason it is regarded as an extremely important part of the foundation course which all foundation students are expected to attend.

It is recognised that special circumstances may make such attendance impossible for certain students. In these cases, subject to the recommendation of the student's counsellor, a student may be granted exemption, but because of the integrated nature of this element of the course, exemption will only be granted in rare cases. Applications for exemption cannot be considered until after a student has been accepted and registered for a foundation course.

Students taking 2 foundation courses will attend 2 schools. The schools are held in several universities during the months of July, August and September. The time-tables are arranged in order to leave a student as free as possible to choose which period he will attend." (1)

Similarly, UNED intends that "between 15 July and 31 August there is to be a week of study-days organised in various universities and university colleges. A total of 40 hours will be given over to lectures, discussions, seminars and practical work.

To pass their examinations, which will cover the same subject-matter as that studied during a traditional university year. students will need to have attended a vacation course devoted to intensive treatment of the subjects for which they have enrolled and to have obtained a good report from the person in charge of the course." (2)

Present developments in the methods used to further contacts between teacher and taught are leading to an ever denser network bringing the student "nearer". If he so desires, he need no longer be alone, for he can work in constant contact with all those who, at various levels, are responsible for his studies. In the Open University's view every means must also be used to strengthen the links between students.

5. Contact with other students

The Open University is systematic in promoting these:

"Students at conventional universities live and study within a small area. This makes for considerable social and cultural contact. Students at the Open University are spread throughout the country and so miss this daily contact with fellow-students. We recognise that this can be a disadvantage and have taken steps to minimise it. Apart from the opportunity to meet others at local study centres and summer schools, other steps we have in mind are: a monthly student newspaper, a weekly radio news programme, and a monthly television programme.

The newspaper will include items by students and also carry university policy decisions, news about courses, and sections helping students in all aspects of their study. The radio programme will contain short, topical items and provide another opportunity for the rapid exchange of views and information. The television programme will allow discussion in some depth on aspects of university study that students find to be the most important. Students will take part in the radio and television programmes with others from inside and outside the university. The programmes should lead to further discussion at local study centres.

(1) 117, p. 23.

(2) 43, p. 8.

In a different way the wearing of university insignia - ties, badges, and scarves - can also stimulate contact between students, and registered students receive details about these." (1)

Likewise, UNED recommends "group work with other students at the university. A student at a regional centre can thus get in touch with other students pursuing the same studies, since each of the recommended activities is so designed as to allow group work.

"UNED also publishes an information bulletin in order to maintain an additional link between it and its students as well as among its students." (2)

The CTEUs in France also encourage meetings of their students in small towns.

D. Assessment

Not all distant teaching at post-university level involves examinations and diplomas. But at university level examinations are usually compulsory for students seeking diplomas or degrees. What is more, these examinations are often of the traditional type, or even identical to those sat by intra-mural students - the aim apparently being to ensure full respect for this new kind of teaching. If there were a special degree or diploma, so the argument runs, it would automatically be less esteemed than conventional qualifications.

1. Conventional examinations

In France, students following the courses provided by the Radios Universitaires, the CTEU, the Paris Universities' Audio-Visual Law Centre and the CNAM generally sit for the same end-of-year examinations as intra-mural students who have opted for this method of assessment. The resulting certificate does not give any indication of the mode of instruction followed.

2. Continuous assessment

The general tendency is, however, on the one hand to establish a system of continuous assessment, which carries at least as much weight as the final examination where this has been retained, and on the other hand to offer a quite new and distinct degree or diploma.

The Pedagogical Funkkolleg used to hold a 2-hour examination each semester. The examination papers, like the homework, were marked with the help of a computer. Such new-style examinations are anything but rigid. For instance, the second examination ran to a printed form of 15 pages containing 22 exercises of various kinds.

The printed form is much the same as that used for homework, described above. Only those students who had successfully passed the written homework tests set each semester could, 8 weeks later, sit the examination.

The whole course thus included 2 examinations plus one second-chance examination.

The Open University has opted for a unit-credit system:

"The Open University has decided that the degree offered to its students should be that of BA (Open University), regardless of the courses taken to obtain that degree. The degree will be issued as a certificate which will bear the complete analysis of the courses taken by that student in obtaining that degree.

In contrast to other British universities, the degree will be awarded on a credit basis, a full credit representing one complete course of 36 units. The student

(1) 117, pp. 25-26.

(2) 184, p. 11.

will be required to obtain 6 credits for an ordinary degree and 8 for an honours degree. In both cases, 2 foundation courses must be included in the course and, for an honours degree, an appropriate number of third and fourth-level courses must also be included.

There are 2 advantages in this system for the student:

a. Should he fail to complete his degree he will still have the credits for courses successfully completed.

b. If for any reason (eg family commitments, ill-health etc) the student fails to complete a course, he has only to repeat it at a later date to continue his degree. Many other universities lack this flexibility.

The question of giving appropriately qualified students any credit exemptions is being discussed at the moment. The primary intention of the system of credit exemptions would be to encourage student interchange between other centres of higher education and the Open University, eg a student at a conventional university, having completed 2 years of a degree course, may be forced by domestic circumstances to leave his course and seek employment. It is hoped that such a person would be able to have credit exemptions and continue his degree course at the Open University.

It should be emphasised at this point that the degree awarded by the Open University will stand equal to the degrees awarded by other British universities." (1)

The intention of the UNILAD project was to combine continuous assessment with frequent examinations:

"One of the disadvantages of a system of examinations or tests held at very infrequent intervals is that the student's assiduity may suffer, with adverse effects on his results. UNILAD believes that it can overcome these obstacles through very frequent exchanges of correspondence between teacher and pupil.

Every Monday the pupil receives a questionnaire on the courses for Monday and Tuesday. Replies have to be sent to UNILAD headquarters 24 hours thereafter at the latest.

On Wednesday the pupil receives a questionnaire similar to the one before but covering the lessons given on Wednesday, Thursday and Friday. He has until Sunday, at the latest, to reply.

Apart from the insight given by this continuous evaluation, the most important assessment will take place in compulsory tests carried out at the regional centres.

These tests will be held on Saturdays, in accordance with the programmed time-table for each subject. In principle each test deals with the ground covered by 4 weeks of courses, so that normally it will take place every 4 weeks. However since the largest number of tests which can be organised on a Saturday is 4, students will have to come to the regional centre every second Saturday.

To pass in a subject the student must perform satisfactorily in 4 course units as well as in any supplementary tests which are thought necessary." (2)

UNED has made similar arrangements, but distinguishes between several types of assessment:

- "Distance assessment": On completion of each learning unit (of which there are 6), a student is required to send in a test for assessment purposes. The corrections and marks (A to E) are entered on his file.

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(1) 33, pp. 135-6.

(2) 43, p. 9.

There are 2 kinds of distance assessment:

- objective tests (pruebas objetivas), consisting of short, precise answers to questions;

- essay tests (pruebas de ensayo), which give a student scope for initiative and self-expression.

A student has to pass all these distance assessment tests in order to be able to take the "personal assessment" tests.

- "Personal assessment": These tests take place at the end of the first 2 terms at regional and local centres.

The questions asked cover all the subjects studied during the term. The marks awarded are entered on the student's file.

A student failing these tests has to take them again, during the first fortnight in November.

- "Final assessment": Account is taken of the marks obtained in the various kinds of assessment test and the supplementary tests as well as of personal contacts. (1)

The trend at the moment is, as seems logical, towards adapting assessment procedures to the new type of teaching and creating new final degrees and diplomas.

If distant teaching lives up to expectations so that its flexibility enables it to adapt more successfully and rapidly than conventional university courses to the different needs of individuals and countries, then these degrees and diplomas will be sought quite as eagerly as those awarded by the older established universities if not more so.

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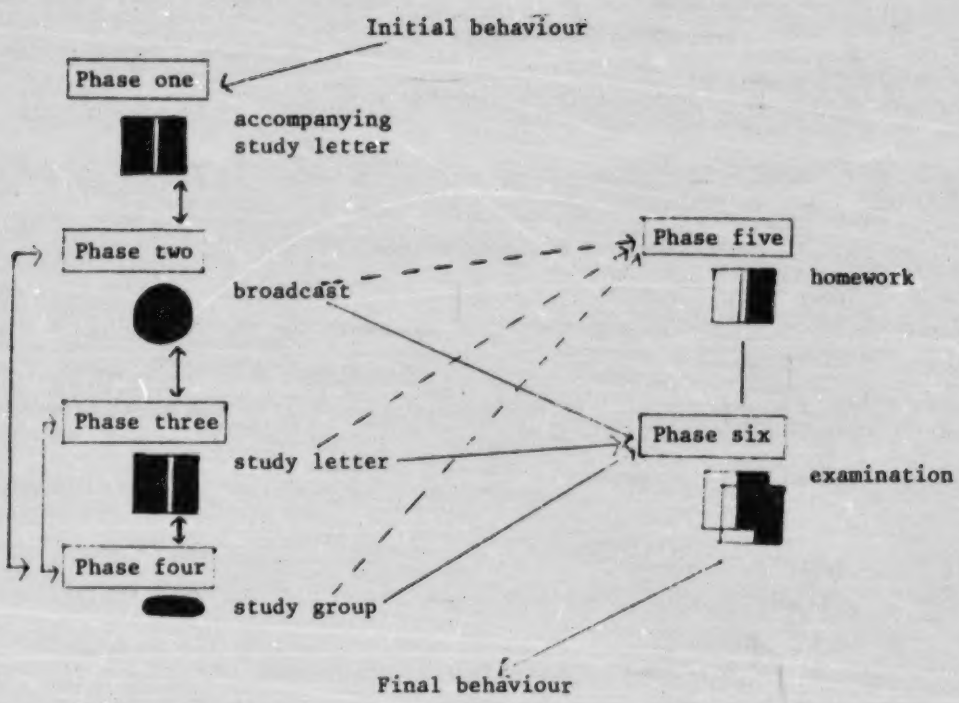
This chapter on methods would be incomplete if it failed to stress that, in fact, 2 different teaching systems are involved.

Sometimes an old university foundation finds itself obliged to set up a new body to reach students who would not otherwise come to the university. In such cases alongside some notable innovations, a distant study system operates, which is so to speak the traditional system transposed - the same kind of courses (even if they are transmitted by radio or television), the same texts, the same homework, the same examinations and the same diplomas. Recourse is indeed had to new media, but in most cases the media are added together or juxtaposed, not really combined. The main gain is that new groups of students are reached, but there is no far-reaching pedagogical reform.

In other cases the establishment of a new body has accompanied pedagogical change based on intensive use of modern media, ranging from audio-visual means to the computer and the way of using these has been thought out beforehand in the context of a true multi-media system.

The Funkkollegs for example, particularly the Pedagogical Funkkolleg, have set up, on the advice of Professor Dohmen, Mr Peters and Mr Rebel, a multi-media system which is more rigorously structured than previous systems. Tasks are allocated, and interaction and feed-back introduced, as between the various components which we analysed earlier: radio broadcasts, accompanying texts (study letters), parallel study-groups, examinations - all conceived and combined in a 6-phase learning system which can be schematically depicted as follows:

(1) 184, pp. 14-18.




from Hofbauer, H. Die Studien-Begleitzirkel des Funkkollegs Erziehungswissenschaft.

In: Film Bild Ton - Zeitschrift für audio-visuelle Mittel in der Pädagogik, 20 Jahrgang, Heft 9, page 25, Heering, München, 1970.

But it is the Open University which has gone furthest both in its study of media taxonomy (greatly influenced by the ideas of Briggs, Campeau, Gagne and May) and in the large-scale application of the principles deriving therefrom. The leading spirit in this operation has been the University's Institute of Educational Technology. This is how the Director of the Institute, Professor Hawkridge, described the scheme in a lecture given in September 1971:

"The instructional system being used by the Open University in Great Britian this year is unique: no other institution of higher education in the world has such a system. It is also the most advanced and sophisticated multi-media instructional system being used to teach large numbers of students at a distance."

This is not the place to describe the operation of the system, from the analysis of aims and objectives to the arrangements for checks and systematic feed-back; the putting together of "courses" by a team, not by one man; the production of media; the methods of distribution; the continuous refinement of the whole process.

To conclude this chapter on methods, we shall limit ourselves to reproducing what the same lecturer had to say on the Open University as an instructional system:

"The cycle of development and testing through which we are trying to put as many components as possible of the whole system: that is to say, that every piece of instructional material that is developed, and every sub-system that is prepared to handle the materials, must be subject to test and revision. The develop-test-develop cycle is found in many areas of the Open University's functioning. Although it is to be found too in conventional universities, in the Open University there is a much more conscious attempt to put the cycle into action.

The Open University is a total instructional system: the controllers of the university are the academic staff. This is true of all British universities. They have between them a subject-matter store from which they select displays. The

selected displays compromise a chosen scope and sequence of subject-matter to be presented through selected media. The student receives the selected displays and is subsequently questioned on his acquisition of knowledge from the subject-matter store through the displays. His responses are fed into an evaluation which determines whether they are correct or incorrect. The evaluator may consist of a computer scoring mark-sense card, or a correspondence tutor assessing assignments. The performance of the student is placed in some form of performance memory, probably the computerised data bank, and is notified to the academic staff. The academic staff may then choose to make a new selected display from the subject-matter store in order to correct the student's poor acquisition of the first selected displays. Naturally, the tutors would have a major role to play in this latter process.

Please note that the Open University has an instructional system which is a closed loop. It does operate on the basis of information received from the students, and will endeavour to modify its courses on the basis of the feedback received from the student."

The very preparation of courses by teams is a model of its kind:

"The production of the course units is a process in which the academic staff work in close harmony with representatives from IET and the BBC. Course units are produced in 3 phases:

Phase I: General planning - outlines of conceptual model of the unit - formulation of the aims and objectives of the unit. At this stage the role of TV and radio is discussed with the BBC and the structuring of the unit is examined by the IET representative.

Phase II: The correspondence text of the unit is produced as a first draft. It is discussed and criticised by the course team and will almost certainly be revised at least once at this stage. It then goes through the process of development testing using student volunteers or professional collaborators to do the testing. The test programme is organised, performed and evaluated by the IET representative.

Phase III: In the light of the development testing results the text is again modified and then printed. Self-assessment tests, computer and tutor-marked assignments are all written at this stage, usually with guidance from the IET member.

Meanwhile the planning of the TV and radio broadcasts has gone ahead ...

The computer-marked assignments are passed on to data processing by the IET representative who also evaluates the results of completed computer-marked assignments before reporting back to the course team." (1)

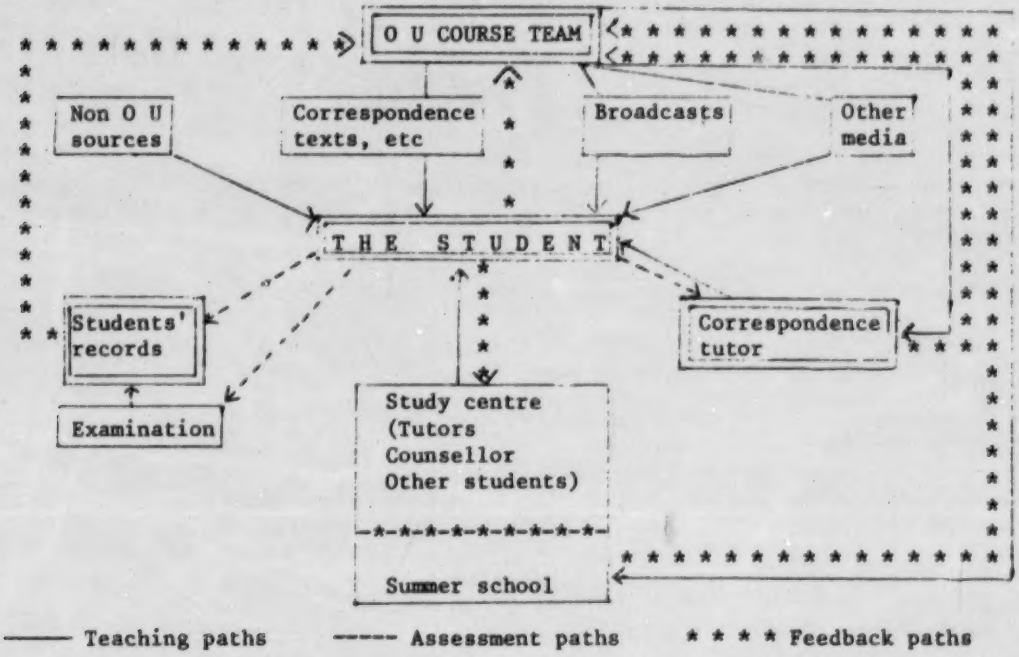
After this long preparatory period, which lasts from one to 2 years, students receive instruction in various forms, all on the basis of precise calculation as to the best way of handling them, and the time needed for assimilation. Here, for example, is the weekly workload expected of a student taking the Science Foundation Course:

| | |
|---|---|
| Studying the correspondence text | 6 hours |
| Answering self-assessment questions | 1 hour |
| Receiving TV and radio programmes | 1 hour |
| Doing home experiments | 2 hours |
| Answering computer-marked assignment material | ½ hour |
| Answering tutor-marked assignment material | 1½ hours |
| Attending a study centre | 1 hour |
| | 13 hours |

(1) 33, pp. 133-4.

As is apparent from the diagram below, the entire educational process revolves around the student. He is at the hub of a whole system designed for him and constantly assessed and re-assessed in terms of his own needs. Here, for once, is a system centred not on the teacher but on the taught.

Diagram: Circulation of information in the Open University's teaching system:



# CHAPTER V

## ORGANISATION

Reflecting the differences in their aims, their statutes and their methods, university distant study systems are very variously organised, be it in respect of administrative arrangements, of study programmes, or of the production process.

A. Some types of administrative organisation

1. The French CTEU

Each centre is simply a department of a university and its administrative structure is determined accordingly. The structure of a CTEU is almost always the same. That of Dijon University may be taken as an example.

The Council (see Chapter III, Statutes) has the following functions:

"The Council of the CTEU shall be responsible for:

- approving the general programme of activities in pursuance of the aims defined in Article 2, and supervising its execution;

- drawing up the draft budget for approval by the University Council.

In the event of the Dijon CTEU being federated with other CTEUs by agreement between the universities concerned, the Council of the CTEU shall ensure that the general programme of activities and the use of the funds allocated for its execution are in accordance with the decisions laid down by the Management Board of the Federation."

A Director is responsible for the administration of the Centre.

"The Centre shall be headed by a Director, appointed for 3 years by the University Council on the proposal of the Presdient of the university. He shall be chosen from among the teaching staff working at the Centre. He shall be eligible for reappointment.

"The Director shall direct the CTEU. In this capacity he shall take all decisions, in conformity with the present statute, that are necessary to the use of distant study media. In particular he shall:

- draw up the programme of activities to be undertaken by the Centre as part of its functions and be responsible for its execution;

- draw up the budget and implement it;

- direct the Centre's staff.

In the event of the CTEU being federated with other CTEUs by agreement between the universities concerned, he shall ensure that all his Centre's activities conform to the general programme drawn up by the Management Board of the Federation."

The CTEU has only a small staff, above all administrative and technical, for the production of poly-copied or printed documents. 3 universities (Dijon, Caen and Clermont) also have radio technicians, since they produce their own programmes in their own studios.

Article 9 provides: "The university shall put at the disposal of the CTEU the posts which were previously allocated to Télé-Enseignement and to the former Arts and Humanities Faculty at Dijon, the posts which it wishes to allocate to the Centre and those which are to be allotted to it under Télé-Enseignement Universitaire for the following categories of staff:

- teachers,
- technicians,
- administrators.

Requests for new posts shall be made by the CTEU and submitted to the Ministry of Education on behalf of the Centre by the university concerned.

In addition, the CTEU may engage temporary staff under contract from among the staff of the university concerned or from outside. This shall be the case particularly for certain teaching staff who contract to produce radio programmes for the CTEU."

The teaching staff have been confronted with a delicate problem. In many CTEUs teaching posts have been established especially for Télé-Enseignement. Usually the holders of these posts have been assigned, like their colleagues, to general teaching duties and devote only a part of their time to Télé-Enseignement. Many French academics consider it undesirable to devote themselves full-time to teaching at a distance but a good thing to do this on a part-time basis. Thus most of the teaching staff of the CTEUs are university staff working for Télé-Enseignement part-time under contract.

As far as finance is concerned Article 11 provides as follows:

"The university shall allocate to the CTEU the specific appropriations made available to it for distant studies and any other funds which may come to it for this purpose. In addition it shall allot to the CTEU, out of its budget for running expenses, that portion which it shall decide to devote to distant study.

A contribution towards running costs and correspondence charges may be requested from those benefiting from Télé-Enseignement. The corresponding sums shall be credited to the budget of the CTEU."

This contribution is low, usually about 35 francs a year, and so the CTEUs are totally dependent on their parent universities even as regards finance.

Nowadays, however, many CTEUs are taking on wider activities in the field of social and occupational advancement and are signing agreements with bodies able to provide them with new staff and more substantial funds.

With regard to the organisation of university distant studies in France, the time has come to mention 2 bodies which, given the degree of centralisation still prevailing in this sector, play a very important role.

The administration of staff and budgets at national level is the responsibility of the Bureau des Techniques Nouvelles d'Enseignement in the Department of the Ministry of Education which deals with universities and institutions of higher education and research.

The Audio-Visual Centre of the Ecole Normale Supérieure at Saint-Cloud, the pedagogic laboratory of a Grande Ecole, has a programme of activities of its own but at the same time undertakes research for the Department of Higher Education and Research into the application of new educational techniques and methods in universities and institutions of higher education. In this capacity, through its sections responsible for research, experimental production and training, the Centre Audio-visuel has participated in, or given its assistance to, most of the distant study activities at university or post-university level, by either undertaking research, helping with the installation of equipment, producing pilot or experimental audio-visual programmes and texts or training skilled personnel. The help of the Centre Audio-visuel is particularly valuable when a new tele-teaching operation is being launched, and thereafter for assessing the operation.

Furthermore, the Centre Audio-visuel is permanently associated with certain schemes such as l'enseignement medical continu (continued medical education), for which it produces television programmes.

2. TRU

This is, as has already been described in the Chapter on Statutes, a "Committee for Television and Radio in Education" set up in Sweden by the Ministry of Education. TRU is not only concerned with the university or post-university level. It concentrates on 6 main sectors, each of which is serviced by an administrative department:

- pre-school education;
- secondary schools and vocational training;
- social sciences;
- medicine;
- natural and physical sciences, technology;
- adult education.

University and post-university educational activities are in fact split up among several departments, but they meet 3 objectives laid down in 1970: responsibility lies with one department (medicine) and "project-groups":

"The directive given to the committee states that production for the universities shall be aimed at technological/natural scientific subjects, and also at the social sciences and medicine. The reason for selecting these subject fields is that they appear to offer the greatest opportunities for a rationalisation and qualitative improvement of instruction.

Technology - natural science. Motive: a new institute of technology is being created in a medium-sized Swedish town (Linköping). TV is to be used to handle instruction without it becoming necessary to employ specially qualified teachers, and to eliminate the need to build excessively large lecture rooms. Possible instruction in shifts is also planned.

Social sciences (economics, business economy, statistics, pedagogics, psychology etc). Motive: a shortage of teachers, and a steadily growing number of students necessitate rationalisation with the help of TV etc.

Medicine. Motive: Sweden is to train 10,000 doctors during the 70s (as many as exist in the country at present). A shortage of teachers, and the general suitability of medicine as a subject for visualisation." (1)

Under the authority of a committee, TRU's activities are supervised by a production unit, with a Director in charge. He is responsible for 4 sectors:

a. administration proper, which also deals with information and in-service training;

b. "project-groups", each of which plans the instruction as a team comprising the project leader, teachers, authors, producers and various assistants;

c. production, which brings out the written and audio-visual material, including radio and television programmes;

d. evaluation, comprising research experts (this sector is being built up at the moment).

TRU is financed directly by the Ministry of Education, but new ways of providing supplementary funds are being examined:

"So far, all TRU's production costs have been paid directly from the national budget, and the universities can use products free of charge during the period of the inquiry, which is calculated to require a further few years. However, there will probably shortly be introduced a system of programme budgeting or frame budgeting, at

(1) 174, pp. 3-4.

the universities and elsewhere; this will mean that the universities can choose freely, within the framework of the funds allocated, between purchasing a teaching package or using teachers alone, to reach the targets set up." (1)

3. The Open University

This is a university in the full sense. It has 6 faculties: mathematics, science, technology, arts, social science and education.

Its principal organs, the Assembly, Senate and Council, were dealt with in Chapter III, Statutes.

The central administration comprises the central registry, correspondence services and data processing.

The administrative staff far outnumber the academic staff, who are relatively few in comparison with the traditional universities. This is because the Open University employs full-time only those academic staff who make up the core of the teams producing course material; however, it also employs under contract on a part-time basis, or for certain limited tasks, specialists belonging to other universities. This gives the university access to the best available talent.

The Institute of Educational Technology (IET) plays a key role at the conceptual and production stages and afterwards in assessing educational programmes with the groups responsible for them. Its functions may be summarised as follows:

"1. To advise the academics on the preparation of the aims and specific objectives of the course.

2. To help the academics to produce test material of a type which can form part of a computer-marked assessment. This is most important since it can prove particularly difficult to produce tests aimed at higher learning objectives, eg analysis, concept formation, critical evaluation etc, and yet these are the type of tests which the computer-marked assignment has been designed to cope with, in addition to the simpler kinds of multiple choice question.

3. To carry out the development testing of course units as they are produced and advise the course team academics on any modification which may be necessary.

4. To ensure that statistical data on computer and tutor marked assignments reach the course team members. These data may influence the nature of a re-written programme for another year.

5. To advise the course team writers on the educational aspects of unit production such as the production of conceptual models, the ordering of information and the inclusion of self-assessment tests which give the student immediate feedback as he is learning.

6. To work in co-ordination with the academics and the BBC representatives in selecting those areas of the unit model which would best be served by TV and radio.

IET members are closely examining the whole approach to the preparation of a course unit, its text, audio-visual aids, testing systems etc. The basic concept is to devise a self-improving system which will be constantly changing, sometimes through small changes as a result of feedback data, through new data from IET research and through new ideas and concepts from the faculties." (2)

The Open University has regional organisations which were described in Chapter IV, Methods:

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(1) 174, p. 7.

(2) 33, pp. 134-5.

- 12 regional centres, each administered by a Regional Director;
- about 300 local study centres.

The cost of the Open University was initially borne entirely by the government, but other sources of finance are now being envisaged:

"The Open University, with large student numbers, will operate at a fraction of the cost of conventional universities, and its students, while working full-time, will not be grant-aided. The major obstacles to the expansion of conventional universities are their operation costs per student and the provision of student grants.

The initial capital expenditure for the establishment of the Open University was provided by the Labour Government and this has been continued by the present Conservative Government. Because the Open University will operate with a comparatively small academic staff and will have no full-time residential students, the capital expenditure on buildings and equipment has been relatively small. The operating costs for a full year of operation are estimated at £3.5 million for 20,000 students but over and above all this is the direct "student cost" made up of part-time regional staff, library facilities etc. This particular item of expenditure cannot be accurately forecast until the university has been in operation for one or 2 years and can assess the regional organisation fully.

The Open University hopes to go some way to becoming financially independent by selling its courses both at home and overseas. For this reason the university has recently appointed a Marketing Director, the first post of its kind in a British university." (1)

4. The Verbund für Fernstudium (VFF)

The general organisation, as defined in the draft agreement drawn up by the Preparatory Committee, has been described in Chapter III, Statutes.

The following bodies have been set up to carry out the tasks of the VFF:

- an Office,

- a Research and Development Institute,

- committees for the various university disciplines,

- "project groups" to be set up in collaboration with the various member universities.

The corner-stone of the whole edifice will be the existing Deutsches Institut für Fernstudium (DIFF) attached to the University of Tübingen; it will be transformed for this purpose.

Set up in 1967 with the financial help of the Volkswagen Foundation, DIFF has been engaged on distant studies since that time and has been totally or partially responsible for many distant study experiments, such as that of the Fünkkollegs and the permanent training of teachers. A Council of Europe document (CCC/ESR (71) 63) describes the ways in which it has developed its activities:

"Its terms of reference are:

- to explore the possibilities of a course of study which makes it unnecessary for a student to attend continuously at a higher educational institution;

- to develop and test models of this kind of course;

- to co-ordinate the work of other institutions in this field.

(1) 33, pp. 130-1.

In order to fulfil these tasks the Institute initiated a discussion about the possibilities of distant study in the German Federal Republic, which was carried on in numerous meetings of representatives of Ministries of Education, universities, students' associations, radio and television experts and educational technologists and which resulted in a joint effort to set up a large distant study organisation or association which will be formed by most of the universities, the Federal Ministry of Science and Education, the Ministries of Education of the Länder, the radio and television stations and other groups interested in distant study. By now most institutes of higher learning have already appointed commissioners for distant study who are co-operating closely with the German Institute for Distant Studies; some of them have even established working groups for the promotion of distant study techniques.

The second main activity of the Institute is research. Some of the research projects are:

- the empirical identification of priorities for the development of distant study courses;

- comparative studies in distant study technology;

- the resistance to instructional innovation by distant study;

- attitudes of chemistry teachers towards distant study;

- drop-out analyses;

- study habits;

- the function of small tutorial groups in distant study courses.

The Institute has formed a division of research specialists who advise the team conducting research work." (1)

The draft agreement of the VFF Committee provides as follows:

"The member universities will:

- put the necessary staff at the disposal of the Centre;

- give the Centre's scientific advisers the possibility, within the framework of their mission, of working in higher educational establishments with the same rights as their own staff;

- assist those working for the Centre to accede to posts in higher education;

- in collaboration with the Centre, settle problems of promotion.

The Centre will be directed by the administrative Director in accordance with its Statutes and those of the Association. The Statute of the Centre is to be approved by the Senate.

The Association will be managed by the Department of Administration whose Director will carry out the policy laid down by the President and will be responsible for the budget."

One of DIFF's main responsibilities will be to ensure co-ordination of the work of the specialised committees and project groups. The agreement defines these as follows:

"In accordance with the Statute of the Association, the specialised committees will comprise representatives of the various specialised fields of higher educational establishments and of the Centre. They will be responsible, in particular, for putting forward proposals for projects, giving instructions to the project groups and supervising their work.

(1) 171, pp. 1-2.

As prescirbed in the Statutes, project groups will be established to draw up, within the framework of their mission, distant study multi-media units.

Teams already in existence in universities who wish to act as project groups are entitled to make proposals following a procedure to be settled in detail by the Statute."

The budget will be fed from various sources at Federal level, and by the Länder and the universities. Clause V, paragraph 5 of the agreement lists only transitional arrangements in this regard.

B. Production: typical organisational forms

Since all the systems described above normally make extensive use of various media, the organisation of production poses a major problem which has been solved in a variety of ways.

1. The organisation responsible for distant studies takes total charge of production

Sometimes it produces the printed documents as well as the audio-visual material.

TRU is a good example of an integrated organisation which both plans and executes its own educational programmes, including radio and television broadcasts.

"As a government committee TRU is unique, as a production unit is connected to the committee. At its start in 1967 TRU took over a large part of the equipment which a private company had built up for commercial TV production. TRU now has about 140 employees but still others are engaged for the production as experts and free lance collaborators. The TRU staff consists mostly of TV and radio producers and technicians, whereas experts in special subjects are employed for the various projects.

TRU is granted funds through the national budget. The Swedish Broadcasting Corporation (SR) has a division for educational programmes that is also financed by State funds .... TRU is completely independent of the SR, even though some of TRU's products are broadcast by SR. As producer of these programmes TRU has to obey the laws and regulations that apply to SR's monopoly of public broadcasting.

TRU owns the copyrights of the programmes broadcast, therefore the programmes can be used freely in recorded form. Other parts of the course materials, ie the printed material, are available through bookstores and the like. The experimental versions of the course materials which are used in controlled learning situations ... are delivered by TRU free of charge." (1)

TELEAC produces its television programmes in its own studio in Delft. All outside reporting is done by a special mobile unit. The technical staff are employees of the Netherlands Radio and Television Company (NOS).

3 CTEU (Dijon, Clermont-Ferrand and Caen) have their own broadcasting studios and technicians and produce their own radio programmes and all the other material necessary for their activities.

CNAM has its own television production centre, which is however staffed chiefly by ORTF technicians working under contract.

The Saint-Cloud Audio-Visual Centre produces, in its own radio and television studios and outside, both its own programmes and those which it makes for the universities.

The planning and production staff, as well as the research and academic staff, are employed by the Ministry of Education.

(1) 33, pp. 171-2.

If NHK succeeds with its plans for a university of the air, it will of course be responsible for its own broadcasts as it is already for secondary school correspondence and radio courses.

2. The organisation does not produce its own radio and television broadcasts

This is the case with Poland's Television Polytechnic, whose programmes are produced by the Polish Radio and Television Company.

Similarly with the Chicago City TV College, it is the Chicago Educational Broadcasting Association which is responsible for production. But the TV College is considering taking over some of the production, in particular a "learning resources centre" which will be responsible for multi-media production, including television broadcasts recorded on video-tape.

12 of the 15 French Radios Universitaires devise their radio programmes, but it is the ORTF which actually produces them. Agreements have been concluded for this purpose and it is worth noting some characteristic clauses defining the responsibilities of the 2 parties:

"Clause 1: Object of the convention

The Office undertakes responsibility for the technical production and for the broadcasting by one or more of its sound transmitting stations on the conditions specified in the following clauses of the teaching programmes devised and prepared by the University (NB: 'The Office' = Office de Radiodiffusion-Télévision Française).

Clause 2: Type of broadcast

The nature of the broadcasts (branch of study, programme), the technical conditions, the days and hours of broadcasting, the station or stations used for the transmission and the number of broadcasts will be set out in a memorandum to be drawn up at the end of the university year ....

Clause 3: General conditions of production and broadcasting of programmes

a. The university will in every case prepare the programmes, fix the dates and times of broadcasting in agreement with the Office, provide the pedagogic material, appoint and pay the teaching staff who contribute to the broadcasts as authors or co-authors and also any actors, performers or players and will assume educational responsibility for the broadcasts. The university may in certain circumstances provide the technical equipment for sound capture, filming or recording of broadcasts or deliver a recorded finished product for broadcasting.

Subject to the provisions of the foregoing 2 paragraphs, the Office will provide and install the technical equipment, the material and staff needed for the technical preparation and broadcasting of the programmes.

b. Where the technical production is undertaken on the premises of the Office or under its responsibility, the regulations of the Office will apply, notably in respect of security, discipline and working conditions. The lay-out of the 'credits' featured at the beginning of each programme will be in accordance with the model drawn up in agreement between the parties.

Clause 4: General conditions for broadcasting of programmes

.... The sole responsibility for the subject matter of the programmes lies with the teachers in charge of an educational broadcast and with the university. The Office may not, without first obtaining authorisation from the Dean and the teachers concerned, cause a recording of a lesson to be heard by a third party before the said lesson has been broadcast. If the Office feels unable to broadcast a programme which it considers to be contrary to public policy or public decency, or likely to constitute a criminal offence, the Dean or his representative will be immediately consulted and will take the necessary action in agreement with the Office.

Clause 5: Ownership, storage and re-use of recordings

a. The tapes or records of programmes produced by the Office or under its technical responsibility are the joint property of the university and the Office, subject to copyright and the exercise of moral rights being retained solely by the authors.

b. The university will be responsible for storing the recordings. However, if the university is unable to keep the recordings in satisfactory technical conditions, the Office may be requested to store them and will do so free of charge.

c. Since re-use of the recordings referred to above may involve additional cost to either party, the parties will refrain from such re-use for whatever, in whatever place or on whatever conditions without written agreement defining where appropriate the conditions of repayment of costs incurred or rights affirmed, in particular those stipulated in the ministerial order determining supplementary remuneration for higher educational staff ...

Clause 7: Costs

a. The university will reimburse in full the expenses incurred directly or indirectly by the Office as a result of, or on the occasion of, its rendering the services defined in Clause 2 of this agreement ...".

Clause 5 is important in the present perspective of the re-transmission of programme subject matter to different publics by various media. A new draft model agreement now under consideration in the Ministry of Education seeks inter alia to deal more closely with the problem of re-broadcasting and other modes of dissemination to which universities and the ORTF will have recourse in the future.

The Open University's radio and television programmes are broadcast by the BBC. A fundamental passage in the appendix to the report of the Planning Committee describes the mutual responsibilities of the 2 bodies in the following terms:

"The radio and television programmes, required by the university and provided by the BBC, are to be planned on the basis of an educational partnership between university and BBC staff. In practice, this partnership will extend over the whole range from the conception of the course to the final production of the programme. The success of this partnership rests on the recognition by both parties that, while effective education is the over-riding objective, and the ultimate responsibility of the university under its Charter, each has a specific professional role to play. The university will prescribe the academic objectives and general character of the broadcasts, in relation to the other component parts of each course, while the BBC will provide the necessary presentation and production skills. In the overlapping area - where the interrelationship of content and presentation is worked out - a reasonable degree of flexibility on both sides is essential in order to secure the proper concern of the academic staff and the fullest use of the experience of the broadcasting staff." (1)

"Considering the essentially novel form of this relationship between a university and a public broadcasting service, the partnership with the BBC has clearly worked with notable success in its first 2 years. Broadcasting staff have been appointed and trained; production facilities have been prepared and equipped; transmission times have been agreed; and a large number of programmes have been made, and some pre-tested. Naturally enough there have been differences from time to time, for example, over-detailed time-tabling arrangements, legal liabilities or interpretations of cost; but these have all been resolved after frank exchanges and argument. Above all, working relationships at all levels have been friendly, vigorous and fruitful so that the university and the BBC look forward to the continuing partnership with confidence.

During the early stages of discussion it was agreed that the BBC should renew its lease of the Alexandra Palace, in North London, to provide a production centre for the university's television programmes, while the radio programmes would be produced in the

(1) 119, p. 5.

Central London studios. The BBC also decided during this time not to create new production departments for these programmes, but to call on the experience of its existing Further Education Departments in radio and television and to enlarge them appropriately to meet the rising production demands of the university from year to year.

Arrangements were made for an extensive conversion and re-equipment of one television studio at Alexandra Palace on which work began in 1969. Experienced production staff were appointed to senior posts in Radio and Television Further Education, with special responsibilities for Open University work. Junior production posts were publicly advertised and drew a large and qualified academic field from which the only appointment problem was one of having to reject so many suitable candidates. These new members of production staff were given a basic induction training and then placed under the guidance of more experienced staff. A series of seminars was arranged to bring senior academic and BBC educational staff into a closer understanding." (1)

It should be noted that, despite its good relations with the BBC, the Open University, which already produced certain audio-visual material such as magnetic tapes, has announced that it intends to have its own radio and television studios in the near future.

Lastly, DIFF, on behalf of the Funkkollegs, has entered into production agreements with a number of radio and television stations in the Federal Republic. It would seem that the VFF will adopt the same formula for its broadcasts.

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(1) 119, pp. 45-6.

# CHAPTER VI

## A TENTATIVE BALANCE-SHEET

The available reports on the various distant study systems in higher education hardly make it possible to attempt a synthesis of the results obtained. At the best one can present an outline balance-sheet, based on such data as lie to hand and using criteria which may not always be the truly significant ones. Much of the information deriving from enquiries and surveys is not expressed in quantitative terms. The only statistics which we have deal with drop-outs, the results of examinations and, in some cases, costs.

A. Drop-outs

The high proportion of persons who drop out from university studies, particularly in countries where there is no selection process at the time of entry, is well known. In Arts Faculties in France, for instance, it is not uncommon to see only one quarter or one fifth of first year students pursuing their studies up to the maîtrise level (fourth year).

In the case of distant study systems involving adults in full-time employment, who may well have overestimated the time they can devote to their studies, a high drop-out rate - doubtless higher than for "normal" students - is to be expected a fortiori. Moreover, an adult working more or less in isolation is likely to lose heart more quickly than a student living in a community.

Some of the systems analysed in this book have produced interesting statistics on this point.

In 1964-65, the Radio-Propédeutiques counted the number of students sitting the examinations held in June and October as compared with the number enrolled for the courses:

| | Enrolled for distant study | Present at the examination | % |
|---|---|---|---|
| Bordeaux | 828 | 630 | 77 |
| Lille | 166 | 85 | 50 |
| Nancy | 66 | 34 | 50 |
| Rheims | 180 | 89 | 50 |
| Strasbourg | 86 | 45 | 49 |
| Paris | 172 | 158 | 90 |

There is thus a drop-out rate of about 50%, except in the case of the Paris universities where the proportion is much lower. It should be noted that, characteristically for this type of student, many do not sit the June examination but only the October one. Again, just because some students sit neither the June nor the September examination it cannot be automatically assumed that they are drop-outs, as some students do not sit the examination at all at the end of the first year, preferring to spread out their studies over 2 years.

Many of these adults have a real fear of the traditional type of university examination, a fear stemming from a variety of causes: unwillingness to measure themselves against other adults better prepared than they are, refusal to sit a conventional examination when the instruction followed has been of a new kind etc. This explains the large percentage who enrol for the examination but fail to sit it. Thus at Bordeaux University in 1963-64:

| Enrolled for Radio-Propédeutique | June examination | | September examination | |
|---|---|---|---|---|
| | Enrolled | Present | Enrolled | Present |
| 818 | 496 | 344 | 466 | 286 |

These figures seem to betray a refusal to "take the jump" at the last moment. Self-elimination plays a very large role.

But this fact must be seen in perspective: the percentage failing to sit an examination for which one has entered may be just as high in the case of students

who have followed intra-mural courses of the traditional, lecture-hall type. The following tables, extracted from the Saint-Cloud Audio-Visual Centre's report on TELE-CNAM for the year 1964, prove the point:

General physics examination (June)

| | Registered | | Absent | | Present | |
|---|---|---|---|---|---|---|
| Intra-mural students | 443 | 100% | 73 | 16.5% | 370 | 83.5% |
| Students from TV centres | 76 | 100% | 11 | 14.5% | 65 | 85% |
| Total | 519 | 100% | 84 | 16% | 435 | 84% |

General physics examination in electricity (September)

| | | | | | | |
|---|---|---|---|---|---|---|
| Intra-mural students | 93 | 100% | 24 | 26% | 69 | 74% |
| Students from TV centres | 15 | 100% | 4 | 27% | 11 | 73% |
| Total | 108 | 100% | 28 | 26% | 80 | 74% |

Radio-electricity examination (June)

| | | | | | | |
|---|---|---|---|---|---|---|
| Intra-mural students | 410 | 100% | 73 | 16.5% | 337 | 82% |
| Students from TV centres | 125 | 100% | 25 | 20% | 100 | 80% |
| Total | 535 | 100% | 98 | 18.5% | 437 | 81.5% |

Radio-electricity examination (September)

| | | | | | | |
|---|---|---|---|---|---|---|
| Intra-mural students | 83 | 100% | 13 | 16% | 70 | 84% |
| Students from TV centres | 17 | 100% | 5 | 30% | 12 | 70% |
| Total | 100 | 100% | 18 | 18% | 82 | 82% |

For the 2 categories of student the percentages are very little different. The only sizeable variation occurs in respect of the September examination in radio-electricity; this is an exception which has been repeated neither in other branches of study nor at other examination sessions.

The following figures, taken from the pedagogical Funkkolleg's report, also give some idea of the drop-out rate but are difficult to interpret since only those students who had done written homework satisfactorily were eligible to sit the examination: (1)

| | | 1st term | 2nd term | Total |
|---|---|---|---|---|
| 1. | Students enrolled on 1 May 1969: 13 x 495 | | | |
| 2. | Subscribers to the "study letters" | 12,100 | 9,350 | 21,450 |
| 3. | Number of students taking the examination | 5,977 | 4,048 | 10,025 |

For courses which are not of a strictly university or post-university type and whose public is ill-defined, the drop-out rate appears to be higher.

TELEAC gives a figure of 70% (2), but this also poses problems of interpretation since it includes viewers of all levels, not university level only.

(1) 33, p. 93.

(2) 33, p. 146.

TRU's comments on drop-outs corroborate our own (given above):

"As in any other educational system or scheme, some of the participants will always stop studying before the courses have been finished. It is difficult to determine ... how many people really finish a radio or television course by taking part right to the end. Nevertheless, information on the drop-out rate is available for the period between the 2 terms of 'English at grammar school level', and the period between the 2 terms of 'business management at grammar school level', ie drop-out between the first and second term of these 2 courses, which both started towards the end of 1968. It should, however, not be overlooked in the case of these 2 courses that the seemingly high drop-out rate observed here is not the effect of participants' discontinuing their studies as such or admitting they have failed. Rather, a great many of the participants presumably intended from the very beginning only to watch part of the course. This applies above all to the grammar school course in business management, the first part of which entitled 'Modern business management' is a general introduction to the subject and is quite suitable for being studied on its own, ie without the rest of the course.

As anticipated, the participants attending the study groups and meetings supervised by a teacher tend to be far more persevering. This effect is probably not only due to the study method in itself, but also to the fact that these participants are more determined and willing to reach a definite aim than the people who do not attend such an organised adult education group or meeting. However, the statement regarding the latter category of students, ie those who work on their own must again be interpreted with care, as it is based on those participants who voluntarily enrolled on a form sheet ... and who are not necessarily representative of the entire category. It is to be assumed that in all the drop-out rate is higher than shown here.

The reason for drop-out given most frequently by participants who did not finish the first year's course is that they did not have enough time to learn the prescribed subject-matter between the individual programmes or that their studies impaired other plans or intentions they had.

Nevertheless, quite a large number of drop-outs state that they are willing to continue their studies when the next course starts." (1)

During the first year of operation of the Open University (1971) there were as a general rule less than 25% of drop-outs in any course, with a rate inferior to 20% overall:

| Course | Students enrolled in May 1971 | Students sitting the examination | Ratio of those sitting the examination to those enrolled |
|---|---|---|---|
| Arts | 6,112 | 5,352 | 87.6% |
| Social Science | 6,001 | 5,036 | 83.9% |
| Mathematics | 4,639 | 3,423 | 73.8% |
| Science | 4,863 | 3,855 | 77.7% |
| Total | 21,715 | 17,666 | 81.4% |

It may thus be asserted that for a distant study system which is properly structured and in which students' work is supervised constantly, the drop-out rate remains low and, in most cases, lower than that experienced in intra-mural universities which do not make a selection at entry.

It even seems that the drop-out rate may be reduced yet further, in particular by strengthening the staff structure. At least this is Chicago City TV College's experience:

"Personal contacts between the television students and the teachers have continuously been reinforced by holding conferences ... at the colleges, and by organising telephone periods etc. The result of these endeavours is that almost 70% of the TV College students now receive credits for the courses they have participated

(1) 33, pp. 181 and 183.

in, whereas in previous years only about 60% of the students reached the examination at the end of each course." (1)

## B. Examinations

In certain cases distant study systems have their own system of examinations and degrees or diplomas. In such cases the number of successful candidates is easily known. In other cases students who have followed distant studies sit the same examinations, leading to the same degrees and diplomas, as intra-mural students. A comparison is then possible between the results obtained by the 2 categories of student.

### 1. Absolute results

In 1969 the Pedagogical Funkkolleg published the percentage figure of students passing each semestrial examination compared with those eligible to sit it: (2)

| | 1st term | 2nd term | total |
|---|---|---|---|
| Students eligible to sit the examination | 5,977 | 4,048 | 10,025. |
| Students taking the examination | 3,722 (64%) | 3,492 (86%) | 7,214 |

### The Open University

The statistics published by the Open University at the end of the 1971 academic year show that the percentage of students passing their examinations and thus eligible for degrees compared with the number enrolled for courses, varied from 59.9% to 85.6%: this is a respectable achievement. Naturally the percentage is much higher in the traditional universities in England, which practise strict selection on admission, whereas the Open University is, by definition - open!

However, when it is borne in mind that the percentage of students passing their examinations in relation to the number taking them varied between 81.2% and 97.8%, the results obtained at the Open University come closer to those of the traditional British universities.

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(1) 33, p. 231.

(2) 33, p. 93.

| Course | Students enrolled for course in May 1971 | Number of students taking the examination (percentage in relation to those enrolled for course) | Number passing with distinction | Number passing without distinction | Total number of passes (and percentage in relation to those taking the examination) | Percentage of passes in relation to those enrolled for course |
|---|---|---|---|---|---|---|
| Arts | 6,112 | 5,352 (87.6) | 175 (3.3) | 5,057 (94.5) | 5,232 (97.8) | 85.6 |
| Social sciences | 6,001 | 5,036 (83.9) | 217 (4.3) | 4,611 (91.6) | 4,828 (95.9) | 80.5 |
| Mathematics | 4,639 | 3,423 (73.8) | 390 (11.4) | 2,389 (69.8) | 2,779 (81.2) | 59.9 |
| Science | 4,963 | 3,855 (77.7) | 154 (4.0) | 3,353 (87.0) | 3,507 (91.0) | 70.7 |
| Total (1) | 21,715 | 17,666 (81.4) | 936 (5.3) | 15,410 (87.2) | 16,346 (92.5) | 75.3 |

(1) Some students took 2 courses at once. However, these totals represent the number of students taking the course and the examinations, not the total student body.

2. Relative results

Several systems have published figures comparing the results obtained by their students with those of intra-mural students sitting the same examinations. The comparison is interesting.

Over a period of 3 years the Chicago City TV College carried out systematic research into the results obtained by the 2 categories of student:

"During the first 3 years of operation of the TV College a systematic analysis of performance was conducted. In this analysis the academic success of the home TV students was compared with that of the regular lecture room students. The result of the first year did not show any noticeable differences. The home TV students achieved better grades only in the course for general biology. Within the framework of this analysis 9 courses were compared with each other: 3 beginners' courses in English, 2 social science courses, 2 courses in biology, and one course each in political science and in mathematics.

In the second year of research 11 courses were compared. These were courses in book-keeping, social science, psychology, shorthand, the humanities, English, biology and physics. In 8 cases no difference in performance worth mentioning was found. In 3 cases the TV students achieved better results: in a year's course in the humanities, in an advanced course for biology, and a term course in physics. In the third year of research students participating in TV courses in lecture rooms were also taken into this comparative study. 6 courses were selected: social science, physics, the humanities, psychology, mathematics, and a language course. When the results achieved in the 6 courses by the home TV students and the lecture room TV students were compared, it became evident that the home TV students were normally more successful. In general, there is no significant difference between the results achieved by students in direct lessons and the lecture room TV students. Wherever there are differences, they are in favour of the regular teaching situation. Home TV students, however, attain even better results than regular students in almost all cases." (1)

The Polish Television Polytechnic's experience confirms that, in any case, "the best results have been achieved in the consultation centres set up on the premises of factories. Here, the participants view the programmes in groups. In this way, they can derive profit from supervision by a qualified teacher, and can elaborate the knowledge acquired immediately after the programme has been broadcast." (2)

There is evidence that distant study is becoming more efficient. The more intelligently the potentialities of the media are exploited, the more the educational effectiveness of distant teaching turns out to be actually superior to that of conventional teaching. Polish experience has made this clear, as one stage has succeeded another:

At the "small pilot project" stage "a survey was carried out among a sample group of 721 candidates, of which 92.4% were male. All of them were more than 19 years old; the largest group was made up of 23 to 26 year-olds (30%), followed by the group of students of 30 years of age or older (24%).

Contrary to expectations, it proved impossible to determine a direct relation between participation in the television course and success in the examination: 68.1% of the candidates having viewed the courses passed the examination, compared with 67.1% of the candidates who did not participate.

It would, however, be premature to assume that the television courses have no influence whatsoever on effective preparatory work for the examinations. The students themselves have confirmed the effectiveness of television in this respect. Nevertheless,

(1) 33, p. 232.

(2) 33, p. 158.

the final result of the preparatory work is not determined by the TV courses alone, but also by the lapse of time between leaving secondary school and starting to study, by the intensity of the students' personal efforts outside of the television course, and by other factors." (1)

At the stage of the pilot-project proper, "the results of the surveys pertaining to this point have shown that the students who followed the TV lectures systematically had much better examination results". (2)

The results obtained by Radio-Propédeutiques students can easily be compared with those of "normal" students at the same level. In 1963-64 the picture was as follows: (3)

Percentage of passes in relation to the number of students sitting the examination

| | June Session | | October Session | |
|---|---|---|---|---|
| | Teaching by radio | Normal teaching | Teaching by radio | Normal teaching |
| Bordeaux | 24.58 | 35 | 33.91 | 33.5 |
| Lille (modern | 25.5 | 40 | 25 | 28 |
| Lille (classical | 40 | 36 | 14 | 49 |
| Nancy (modern | 24 | ) 45 | 28 | ) 49 |
| Nancy (classical | 40 | ) | 8 | ) |
| Rheims (modern | 35 | ) 40 | 14 | ) 37 |
| Rheims (classical | 35 | ) | 0 | ) |
| Strasbourg | - | - | 33 | 35 |
| Paris | 41 | 43 | 48 | 32 |

The results obtained through normal teaching seem in general to be better, but there are some notable exceptions to this rule.

Besides, the situation varies considerably from one university to another. Possibly the attitude of the teaching staff towards tele-teaching, or the way in which programmes are put together, has something to do with this. For instance, in Paris, where programmes are produced by Paris University and correspondence courses by the CNTE, the percentage of students who passed their DUEL (arts) examination in 1969-70 was 91% for the first-year examination and 82% for the second.

A more refined analysis relating only to the University of Bordeaux led to the following conclusions:

"The gross percentage of successful candidates compared with those sitting the examination (average 29.5% for the 2 sessions) is not very different from that of students not enrolled for the Radio-Propédeutiques courses (successful candidates in June 35%; in October 33.5%). Despite the help given by the written material and radio broadcasts, isolated students are at a disadvantage compared with those who attend lectures.

Among students enrolled for tele-teaching who failed their examination, a certain proportion owe their failure to a very low mark in one of the subjects not covered by this experiment, eg Spanish. The percentage of successful candidates is thus lowered, and it may be supposed that proper preparation in all subjects would have led to a pass-rate of almost one third of all students sitting the examination (40% of enrolled students pass their test in Spanish).

(1) 33, pp. 161-2.

(2) 33, p. 164.

(3) 93.

13% of successful candidates passed with distinction, including 5 bien. This is nearly twice the percentage of those who have followed the traditional courses.

Contrary to what is found in traditional propaedeutic classes, the percentage of successful candidates is higher in October. This is because some good students consider that they are not ready to sit the examination in June and spend their holidays preparing themselves further". (1)

In some universities the results obtained by the Radio-Universitaires in 1964-68 would, on the face of it seem to justify a degree of pessimism:

| Academy | 1964-65 | 1965-66 | 1966-67 | 1967-68 |
|---|---|---|---|---|
| Aix | 23% | | 18% | 27% |
| Besançon | | | 31% | 42% |
| Bordeaux | 18% | 20% | 14% | 36% |
| Caen | 18.5% | 18% | 22% | 30% |
| Clermont-Ferrand | | | 3% | |
| Dijon | 29% | 35% | 19% | 33% |
| Lille | 18% | | 24% | 22% |
| Nancy | 19% | 14% | 10% | 39% |
| Nantes | | | 18% | |
| Rennes | 9% | | 14% | 38% |
| Rouen | | | 25% | |
| Strasbourg | 15% | 19% | 24% | 48% |
| Toulouse | 15% | 22% | 15% | 61% |
| Paris | | | 18% | 27% |
| Paris-Droit | | | 28% | |

- percentage of students passing the examination compared with those enrolled for tele-teaching.

One striking fact is the great diversity of the results obtained in the different universities.

It should moreover be noted that the percentage figures are based on the number of students enrolled for distant studies. We have already seen that such figures are misleading. What really matters is the percentage of successful students compared with the number actually sitting the examination. However,

"No national statistics are available of the number of successful candidates in relation to those present at the examination, ie those who have followed the courses seriously and prepared themselves for the test.

The rates vary with the branch of study and the university concerned. To reduce them to a common denominator would not be easy nor would it be conclusive.

(1) 93.

To take only one example, that of Bordeaux, we note that the percentage of successful candidates is generally about 30%. However, in 2 disciplines it reaches 50%, while in another, in which regular attendance at practical work conditions success, it falls to 14%.

More generally it would seem that a pass rate of 50% of those actually sitting the examination represents an average which is at least reliable as an order of magnitude.

For our pruposes, comparison of the results obtained by 'normal' and 'distant' students is more significant than comparison between faculties. The success rate of the latter students is generally 10-20% lower than that of the former. Nonetheless, it is rather widely held that this rate is a respectable one and comparable to the results obtained by traditional teaching, having regard to the difficult conditions in which the student following broadcast courses is obliged to work." (1)

A detailed analysis bearing on a few universities confirms these general figures. At Caen, for example, the situation is as follows:

Examination results 1967-68

| | |
|---|---|
| Enrolled at CTEU | 275 |
| Enrolled for examination | 261 |
| Present at examination | 159 |
| Passed at first attempt | 68 |
| Passed at second attempt | 20 |
| Total passes | 88 |
| Total as percentage of those present | 55% |
| Total as percentage of those enrolled | 33% |

"The fall-out thus occurs at the time of actually taking the examination. Among those present at this the success rate is identical with that of students at the faculty." (2)

At Dijon it is observed that "curiously, pass rates have evolved pari passu with the number of those taking part:

- in 1964-65 and 1965-66 the overall result showed an average pass rate of nearly 45%;

- in 1966-67 the percentage fell below 30%;

- in 1967-68 it went up to 50% and even beyond." (3)

Finally, the success rate varies very greatly according to discipline. This emerges clearly from the following table showing the results obtained at Aix-Marseilles in the years 1967-68 and 1968-69:

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(1) 55, p. 1.

(2) 55, p. 12.

(3) 55, p. 67.

| | 1967-68 | | | 1968-69 | | |
|---|---|---|---|---|---|---|
| | Enrolled | Sat the examination | Passed | Enrolled | Sat the examination | Passed |
| Classics | .3 | 1 | 1 | | | |
| | | | | Modern literature (2nd year) | | |
| | | | | 74 | 50 | 43 |
| Modern literature | 76 | 37 | 22 | 136 | 1st year 58 | 37 |
| English | 53 | 23 | 19 | 89 | 1st year 39 | 18 |
| | | | | 43 | 2nd year 30 | 20 |
| Spanish | 20 | 8 | 3 | 33 | 16 | 10 |
| Italian | 14 | 7 | 6 | 38 | 14 | 11 |
| German | 6 | 2 | 0 | 23 | 12 | 5 |
| History | 42 | 11 | 5 | 46 | 9 | 4 |
| Philosophy | 14 | 5 | 2 | 22 | 10 | 9 |
| Portuguese | 12 | 8 | 5 | 19 | 6 | 3 |
| | 240 | 102 | 63 | 523 | 264 | 150 |

(1)

TELE-CNAM undertakes systematic comparative surveys of its 2 categories of students. The following table, which relates to the June 1964 examinations in radio-electricity and general physics (electricity), shows that in general, from the point of view of examination results, there is little difference between the 2 kinds of teaching.

(1) 55, p. 3.

| COURSE | Registered for the examination | | Absent | | Completed examination papers | | Marks (out of 20) | | | | | | Average mark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 0-7.5 | | 8-11.5 | | 12 and over | | |
| RADIO-ELECTRICITY Classroom students | 443 | 100% | 73 | 16.5% | 337<br>100% | 82% | 220<br>65% | 53.5%<br>5.4 | 72<br>215% | 17.5%<br>8.4 | 45<br>13.5% | 11%<br>12.8 | 7 |
| TV Centre students | 125 | 100% | 25 | 20% | 100<br>100% | 80% | 74<br>74% | 59%<br>4.5 | 16<br>16% | 13%<br>8 | 10<br>10% | 8%<br>12.8% | 5.9 |
| TOTAL | 535 | 100% | 98 | 18.5% | 437<br>100% | 81.5% | 294<br>67% | 55%<br>5.2 | 88<br>20% | 16.5%<br>8.3 | 55<br>13% | 10%<br>12.8 | |
| GENERAL PHYSICS (Electricity) Classroom students | 443 | 100% | 73 | 16.5% | 370<br>100% | 83.5% | 221<br>60% | 50%<br>3.7 | 77<br>21% | 17.5%<br>8.7 | 72<br>19% | 16%<br>12.8 | 6.5 |
| TV Centre students | 76 | 100% | 11 | 14.5% | 65<br>100% | 85.5% | 43<br>66% | 56.5%<br>3.2 | 16<br>25% | 21%<br>8.6 | 6<br>9% | 8%<br>13.2 | 5.5 |
| TOTAL | 519 | 100% | 84 | 16% | 435<br>100% | 84% | 264<br>61% | 51%<br>3.6 | 93<br>21% | 18%<br>8.7 | 78<br>18% | 15%<br>12.8 | 6.3 |

"Studies carried out by the Saint-Cloud Audio-Visual Centre in 1963-64 were completed by an analysis of the results obtained at the examinations for general radio-electricity, general physics and preparatory mathematics. The main object of this survey was to measure the impact of various ways of preparing for the examination (lecture hall, correspondence courses, group work, television programmes) on the results.

For the certificate in preparatory mathematics, the results obtained by the students who had followed televised courses were slightly superior to those of candidates who had adopted other methods of study.

For the courses in general physics and radio-electricity, on the other hand, the results of the reception centre students were slightly less good than those of lecture hall students.

To compare the 2 groups properly one would need, at the start of the course, to assess the level of general intelligence and of mathematical knowledge of each. Actually, a survey of students following the course in radio-electricity revealed that those enrolled for lectures had better paper qualifications than students attending reception centres. Two thirds of lecture hall students held at least one CNAM certificate, as against only one third of students attending reception centres.

This difference is due to the fact that new students generally enrol later than those who have already enrolled the year before. Enrolment lists for the normal courses having by then been closed, these students are systematically directed to the reception centres.

It is probable that, as regards the CNAM certificate in preparatory mathematics, the 2 groups are much more homogeneous.

Incidentally it may be noted that no very clear relation is to be observed between the level of studies and success in examinations. However, the average rises slightly with the number of CNAM diplomas previously obtained." (1)

C. Surveys

Many bodies, not content with collecting statistics on examination results, have carried out various surveys to assess their performance and the pedagogic effectiveness of their teaching. These surveys have covered a variety of subjects, from audience measurement to the attitude of teachers and students. Here are some examples.

TELEAC carries out regular enquiries concerning its public and audience reaction:

"TELEAC ... examines the response of the various audience groups to the individual courses. In so doing, it distinguishes between participants and 'normal' viewers .... 'Normal' viewers ... are people who have their television on while the programmes are being broadcast and who have watched more than half of the lessons.

In this research work, which has been carried out for 6 years now (1965-71) following each course, TELEAC applies a written questionnaire for asking the participants questions. As compared with the direct interviewing method, this procedure offers the advantage of enabling TELEAC to reach the participants quickly and without incurring substantial expenditure (one day after the last television lesson has been re-broadcast). Nevertheless, one argument against this written questioning method is that the entire undertaking depends largely on the participants' willingness to fill in and return the questionnaire. Fortunately, TELEAC has found that most of the participants were indeed prepared to do this. The number of participants who return the filled-in questionnaires to TELEAC is quite considerable compared with most other written questioning projects of a similar kind: it is done by approximately 70% of the participants.

(1) 94.

The questionnaires serve 4 different purposes:

- to determine the participants' actual behaviour (drop-out rate);

- to determine the way the student body is made up (in terms of sex, age, standard of education, residence etc);

- to find out the participants' opinions on the presentation, contents, and style of the television course and the extent to which the accompanying material and the television lessons form the individual elements;

- to determine the extent or intensity with which the participants are interested in further courses or new courses that might be broadcast." (1)

The Polish Television Polytechnic has undertaken a number of surveys and polls regarding the sociological make-up of viewers, their motivation, their participation in the televised courses, and students' judgement of this kind of teaching. We read, for example:

"A survey has made it possible to determine the role allocated by the students to the various elements and factors which are of significance within the framework of the courses. This survey showed that the participants considered the following factors to be absolutely necessary in order to reach high quality courses: good and clear speech of the professor, a clear sequence and illustrative presentation of the problems, and practical examples of the solution methods to be used for the sample exercises. The most frequent objections, which were made even in the best courses, related to progression, which does not follow that of the technical universities and was often termed 'too fast'." (2)

Students are even asked to give their views on the effectiveness of particular courses:

"The students who had taken part systematically in the mathematics course voiced the following opinions on the instructional effect of these programmes: 67.8% believed that the programmes helped them in their studies, 14.6% termed the programmes as 'very helpful', while 8.3% regarded them as 'superfluous'. The following percentage rates were determined for the other subjects, again applying the above categories:

| | | | |
|---|---|---|---|
| Physics: | 66.7% | 18.4% | 5.0% |
| Electronics: | 65.4% | 21.2% | 5.8% |
| Strength of materials: | 73.3% | 16.7% | 6.7%". (3) |

TRU, which uses initial aptitude tests ("diagnostic examination"), analyses and carries out surveys on the opinions of teachers and viewers, the courses offered, the level and the composition of the viewing public and the circumstances which led the latter to follow the programmes. Despite these efforts "it is ... difficult to summarise the participants' opinions on the first adult education courses run by TRU simply by applying relatively comprehensive questionnaires etc. Nevertheless, it may be claimed in the case of the business management course that the students at remote study institutes showed a far more positive attitude than the other groups of students - both regarding the programmes and the literature used. Generally speaking, the opinions of the radio programmes are the least positive while the television programmes are more popular. The most popular medium is however the course books with the repetition work included therein.

It can hardly be said that the participants' judgement of the overall course was absolutely positive. One of the main objections was that the programmes were too short and the rate of progression too fast. Moreover, it was said that the programmes

(1) 33, pp. 145-6.

(2) 33, pp. 163-4.

(3) 33, p. 165.

and the course books were too difficult. These views were expressed by quite a large number of the persons questioned." (1)

Chicago City TV College also relies heavily on surveys and polls to ascertain its public and the latter's social and occupational make-up, motivations and reactions:

"When the comments of a few hundred City Colleges of Chicago graduates, who had completed part of their studies through TV courses, were evaluated, the Television College was appraised positively. The majority was of the opinion that television courses were somewhat more demanding than conventional courses. Most of the students stated that they had learnt just as much through TV as they would have learnt in lecture rooms, and that they received approximately the same grades. A large number said that they thought that the television courses were organised better than courses in conventional lecture room teaching, and that the material taught was presented more effectively." (2)

A survey carried out among the TV teachers confirmed the results of several similar surveys made by, among others, Penn State University and the Saint-Cloud Audio-Visual Centre:

"The TV teachers, most of whom have many years of teaching experience, consider the television courses to be superior to traditional teaching, as the teacher has more time to meditate on the programme and organize it. The teachers enjoy re-preparing the material to be taught with a new approach and modern technical facilities. On the other hand, teachers who have not yet taught on television have, in general, a negative opinion of TV teaching. They do not, however, object to TV teaching as such, but only when it is used for their specific subject .... In addition, they criticise the lack of personal contacts between the teacher and his students, and point out the shortage of opportunities for the teacher to hold discussions with the students. The fact that teachers who originally had a negative opinion of TV teaching changed their opinion to a positive one, when they had been informed of the mode of operation and the possibilities of television teaching, and when they became acquainted with the advantages TV offers for preparing and developing a course, shows that their attitude was partly emotional." (3)

Another enquiry brings out the relative merits and limitations of distant teaching compared with the instruction dispensed in lecture halls:

"The majority of the television students (home students) have a positive opinion of TV teaching. Here, too, it became evident that the students' positive opinion increases according to their experience in being taught through television.

The most frequently mentioned favourable aspects of the TV College were, in inquiries answered every semester by the Chicago television students:

- the TV teacher is prepared better for the lesson than a normal teacher, and the material taught is more comprehensive than is normally the case;

- the teacher is able to present the material without being interrupted or disturbed;

- TV teaching provides people, who would otherwise not be able to study at a normal college due to certain personal conditions, with a possibility for further education.

The most common negative comments regarding the TV College were:

- there are only few opportunities of asking questions and discussing items of interest;

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(1) 33, pp. 186-7.

(2) 33, pp. 231-2.

(3) 33, p. 233.

- there is no personal contact between the teacher and the students;

- many teachers proceed at too fast a rate in their courses, and

- TV teaching is dull and monotonous, and it is difficult for the student to concentrate.

Lecture room TV students, on the other hand, are characterised by a primarily negative attitude towards television teaching. There are several reasons for this varying appraisal of TV teaching among the various groups of students. First, the fact that lecture room TV students are not able to choose between television courses run in a lecture room and regular direct teaching, but are allocated to TV classes for reasons of teaching economy, may partly explain their negative feeling for TV teaching. Secondly, there are various factors indicating that home TV students are characterised by greater motivation, due to their specific situation and their definite vocational aims. This might well explain the better results achieved by these students and their positive attitude towards television teaching." (1)

The Audio-Visual Centre of the Ecole Normale Supérieure at Saint-Cloud has organised surveys and polls for the Radio-Propédeutiques, Radios-Universitaires and TELE-CNAM. The results have been published in numerous reports which are listed in the Bibliography (see Appendix). As regards TELE-CNAM, for example, studies have been made of publics, their composition, the results achieved by various courses, sundry aspects of television teaching including its "rhythm", a comparison between televised and classroom teaching, the behaviour of students following televised courses, and a comparison of group viewing (in reception centres) and viewing at home.

As regards this last point, "the great majority of isolated viewers acknowledge that, from the pedagogic angle, collective listening and viewing have many advantages over individual listening and viewing. If nonetheless some of them have opted for this latter, it is because they have been aware of the following advantages (listed in order of pirority):

- time gained,
- peace and quiet, silence,
- better concentration,
- comfort,
- greater independence vis-à-vis CNAM,
- less disruption of family life,
- right distance from the screen.

Other viewers point out the drawbacks:

- isolation,
- no possibility of clearing up certain obscure points in the course,
- work inadequately supervised,
- frequent interruptions,
- disturbance of family life,
- tendency to become fed up and lose heart.

Along with the group viewers, these isolated listeners attach great importance to contacts with other students and to the help given by tutors in the reception centres." (2)

"Listeners and viewers, tutors and directors of reception centres place great value on this facility and prefer it to isolated programme watching. It is those who have never followed TELE-CNAM's programmes in their own homes who are the most firmly opposed to this mode of instruction (27% of viewers in reception centres have had a chance to listen to the programmes at home).

Group work and the presence of a tutor seem to be the main advantages. Because the groups are small, conversation and exchanges of opinion are encouraged: the

(1) 33, p. 233.

(2) 94, p. 23.

viewers get to know each other. People get together in small groups for study purposes outside the organised sessions." (1)

Paradoxically enough, many of the surveys conducted by the Saint-Cloud Audio-Visual Centre lead to the conclusion that, in the eyes of many students, distant studies are coming to be considered a form of teaching that is both much more carefully prepared and much more personal - whereas some accuse them of being a form of dehumanising mass instruction. Students point out that, now that teachers no longer have them constantly under their eye in a lecture hall, they feel the need to establish personal contact with them, often at length, through correspondence and organised group meetings. It is odd to find students who have abandoned conventional higher education for distant studies writing in that these are more "human", "individualised" and "provide more personal contact".

Finally, we should perhaps accord greater importance to certain factors - peace and quiet, comfort, solitude, the small size of groups - which, if we are to believe certain reports from the Saint-Cloud Audio-Visual Centre, may exercise a decisive influence in the direction of tele-teaching.

"Whenever there is an apparently free choice between the lecture hall and televised programmes, we have found several arguments in favour of reception centres. Doubtless family habits play their part. 60% of students attending reception centres have television sets at home, as against only 40% of 'normal' students. It can plausibly be argued that those who regularly watch television programmes accept this new teaching channel more readily. Against this, the ill-informed are apt to be prejudiced against it: they need to be properly informed about the way in which this channel operates.

The decisive element is the propinquity of one's home or place of work to the reception centre. This point is made by 60% of students attending the centres, whereas only one third of lecture hall students mention the question of distance. Nearness to a reception centre is doubly important. Firstly, the student can stay later at work, which helps his relations with his employer: he is not held up and so obliged to miss the beginning of a lesson. Some pupils have even said that it would be impossible for them to get to a lecture hall. Secondly, the student reaches home earlier - and for many adults this is a very important point. For persons already earning their living, the advantage of having a reception centre near at hand cannot be over-estimated. The lecture hall is a sort of 'big store' in the town centre; reception centres, in contrast, are 'local shops' conveniently placed for consumers living in the outer suburbs or even in the countryside. This hypothesis is supported by the fact that 70% of 'customers' of reception centres do indeed live in the suburbs, as against only 50% of lecture hall students.

Lastly, students are conscious of the fact that working conditions are better in reception centres than in lecture halls. Instead of a crowd of 500 people, the centres are now restricted to groups of 10-30 students. In the lecture hall outside noises are inevitable. The silence of a reception centre room is conducive to study and concentration. The loudspeaker relays only the voice of the teacher, with no extraneous sound.

Paradoxically, it can even be argued that teacher-pupil contact is easier in reception centres than in lecture halls. Indeed, in the latter such contact is virtually non-existent owing to the large numbers of students. In the centres, an assistant is at hand during lesson to supervise the exercises or give further explanations on the programme. Of course, these advantages are not specific to televised instruction; but as this type of instruction encourages the formation of small groups, which it would be unthinkable to leave unsupervised, the need for the presence of an assistant becomes an actual advantage, for which tele-teaching may be held indirectly responsible."

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(1) 94, p. 25.

D. Calculating the cost

Finally, to complete this balance sheet we should look at the studies which have been undertaken regarding the cost and cost-effectiveness of these various kinds of teaching. Unfortunately few investigations have been carried out in this field and having regard to the methods used some of the results must be treated with caution.

As early as 1965 the Office of Technical Studies, a body responsible jointly to the Ministry of National Education and the ORTF for technical and economic studies relating to audio-visual education, attempted to determine the cost per head of the Radio-Propédeutiques student, taking the following factors into account:

a. Cost of higher education

- equipment
- supplies
- teachers' emoluments
- emoluments of other staff
- overheads (reckoned at 20%);

b. Cost of services rendered by the ORTF

- programme expenses
- technical production costs
- broadcasting costs
- distribution costs.

The figures for each university tell us the yearly cost per student:

- Paris: 1,390F
- Bordeaux: 610F
- Lille: 3,630F
- Nancy: 1,645F
- National average: 1,290F.

As many of the expenses are fixed, the variations are of course due above all to the number of students enrolled.

"The Ministerial Committee responsible for supervising the experiment was very favourably impressed by the average cost (1,290F) of a student enrolled for Radio-Propédeutiquen courses.

The committee concluded that this cost was in fact even more reasonable given that only registered students had been taken into account and so cannot be considered as an entirely true estimate. As is made clear from the data provided by the Deans of Faculties, the majority of viewers of these programmes were not registered students.

Besides, since the number of students is in 1964 increasing, whereas the basic expenditure remains more or less the same, the cost per head will diminish considerably.

The committee would have liked to be able to compare this figure with the cost of a student enrolled for a 'normal' propaedeutic course and also with the total cost per student in all French universities; but this operation raised problems for the Ministry's specialists." (1)

The Open University expects to provide teaching of equal quality at lower cost from the very outset:

"The initial capital expenditure for the establishment of the Open University was provided by the Labour Government and this has been continued by the present Conservative Government. Because the Open University will operate with a

(1) 93, p. 55.

comparatively small academic staff and will have no full-time residential students, the capital expenditure on buildings and equipment has been relatively small. The operating costs for a full year of operation are estimated at £3.5 million for 20,000 students but over and above this is the direct 'student cost' made up of part-time regional staff, library facilities etc. This particular item of expenditure cannot be accurately forecast until the university has been in operation for one or 2 years and can assess the regional organisation fully." (1)

Leslie WAGNER, assessing the initial results of the Open University, comes to the following conclusions, whose importance will be readily apparent:

"The article makes a number of cost comparisons between the Open University and traditional universities in order to arrive at an order of magnitude for the difference in cost between these 2 types of institution in terms of teaching and the output of graduates. It begins by setting out the conceptual and statistical difficulties involved in comparisons of this kind and makes a number of suggestions for overcoming them. After describing the Open University system and its financial implications, the article makes 4 comparisons between the Open University and traditional universities, viz a comparison of the average cost per student, which shows that the cost at the Open University is slightly less than one quarter of what it is at traditional universities; a comparison of the capital cost per student place, which reveals that the figure for the Open University is about 6% of the usual figure; a comparison of the average cost per graduate, which shows that the 2 types of institution would cost the same if the Open University had a drop-out rate of 85%; and, finally, a comparison of the cost per undergraduate student, which in the Open University is about one sixth of that at a traditional university.

Even allowing for the difference in emphasis on research in the 2 cases, the Open University appears to offer several advantages. The article suggests that what is crucial is not so much the fact that the Open University's students are part-time ones as the nature of its teaching methods. Because of the conceptual and statistical ambiguities attaching to comparisons of this kind, the article does not draw any hard and fast conclusions but suggests that, in view of the financial difficulties which higher education is currently experiencing, consideration ought to be given to the introduction of the Open University's teaching methods into traditional universities". (2)

The sponsors of the Funkkollegs consider their enterprises to be altogether cost-effective:

"The economic advantages of the Funkkollegs are more than obvious. The costs can be kept within perfectly reasonable limits, the more so as the broadcasting corporation can share them with other partners as well, and as the participants also contribute a reasonable amount. Another cost-saving factor is the combination of centralisation and decentralisation (centralised production of study materials, centralised broadcasting and distribution, but decentralised study groups, making use of the existing Volkshochschule organisation)." (3)

"The total cost for the organisation of Quadriga-Funkkolleg in Pedagogy was approximately DM 668,200. This sum includes only the direct costs and does not include indirect expenditure (eg remuneration for permanent DIFF collaborators, usage of premises and equipment).

Assuming that the average number of participants was 10,000, the total cost per student was DM 66.82 (approximately DM 67).

In 1967, the Federal Republic of Germany spent the sum of DM 4,330 for each full-time student attending a teachers' training college. If it is assumed that

(1) 33, p. 131.

(2) 187.

(3) 33, p. 77.

a full-time student attends 20 one-hour lessons a week, this would result in a sum of 20 times DM 67, in the case of the Quadriga-Funkkolleg in Pedagogy, which would in turn result in a sum of DM 1,340 for each student.

Naturally, this comparison is not completely justified. However, if it is applied in relation to our present-day university system it does indicate that, by using a multi-media study system made up of a direct phase and a distant study phase, it would be possible to realise a saving of about DM 2,990 = 69%.

The actual saving is not quite as substantial as this, as the indirect costs have not been taken into consideration in this calculation. On the other hand, however, a far higher rate of saving will result when the number of students increases, as expenditure for soft-ware will stay the same, regardless of the number of students." (1)

Curiously enough, administrative authorities tend to think that tele-teaching is less expensive, even during the initial phase when the number of students is fairly small.

For instance, UNED is starting off with a budget of 55 million pesetas for more than 8,000 students, whereas the University of Santiago, which has only 10,000 students, has a budget of 250 million pesetas.

However, expenditure pertaining to the regional and local centres is borne by the provincial authorities.

The Chicago City TV College has examined with care the cost of distant study.

"Before discussing the expenses in detail, the various factors which must be considered when calculating the direct costs must be broken down. These expenses are fees for public broadcasting through the studio; salaries for the teachers, the production staff and the administrative staff; expenditure for research material and audio-visual material; the costs for printing and mailing written material; transport; and expenses for extra office staff as required. These direct costs do not include fees for using library facilities; services rendered by officials; registration; heating and lighting the classrooms used by TV working groups - ie services rendered under normal conditions by the interested institution. These costs would only increase the total budget by a small margin - and could be met partly by income resulting from services rendered by the TV College and by fees paid by non-credit students.

By means of this breakdown of expenses the costs per television student can be calculated and compared with conventional teaching methods. In the first year of operation of the TV College (1956-57) when only 4 courses were broadcast and the number of credit students per course was relatively low, the expenditure of the TV College per student was considerably higher than the costs per normal student at the City Colleges of Chicago. In 1959, however, when 9 courses were broadcast each term, the expenses per capita dropped considerably, and in the fifth year of operation of the TV College (1960-61) when there was an average of 800 credit students per TV course, the expenses for each student were exactly as high as for a normal student at the City College, namely approximately $500 a semester. During the following terms the expenses per TV student dropped below the cost per student in normal teaching, proportionally to the increase of students in the individual television courses." (2)

Thus we cannot but subscribe to the remarks made by James J Zigerell, one of the moving spirits in the Chicago City TV College: "Politicians and educational planners, who are considering the introduction of television in the formal educational system, should bear in mind that - as soon as the expenses for TV teaching correspond to those for normal teaching - an additional number of students can be taught through the TV College with far lower expenditure than would be incurred by conventional teaching, in which the costs increase in an almost linear proportion to the increase in the

(1) 33, pp. 103-4.

(2) 33, p. 234.

number of students. In addition, the TV College provides educational facilities to a large number of non-credit students who have not been taken into account in the above comparison." (1)

However, if the politicians are to take their decisions in full knowledge of the facts, the experts in education management will have to agree to give serious attention to this problem and apply to it the methods which have been tried and tested in industry and commerce.

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(1) 33, p. 234.

# CONCLUSION

The study of the various experiments carried out and organisations established, mainly in Western Europe, for teaching at a distance at post-secondary level through the use of radio and television, correspondence courses and sundry other media, does not permit construction of a typology; ends and means are diverse, and cannot be reduced to a few model systems. All that is possible, by way of conclusion, is to try and indicate the main lines of force which seem to emerge in this dynamic and constantly changing situation.

Aims vary considerably. Sometimes the objective is to provide a normal higher education for people who have not been able to obtain one: this is the case of the British Open University. Other systems offer a variety of occupational refresher courses, while others again provide courses leading to traditional examinations set in the context of conventional higher education (in France, the Radio-Propédeutiques, Radio-Universitaires and CNAM). Some offer advancement programmes to persons already working but desirous of climbing higher. Finally, certain experiments are designed above all to heighten public awareness of certain problems.

In addition to their clearly defined objectives, these systems frequently have some general cultural purpose, and the "educational fall-out" is by no means the least interesting part of the experiment.

The aims may be classified in another manner.

Some of the instruction is complementary, ie intended as a supplement to another kind of teaching. To a certain extent Poland's pilot scheme falls into this category; it covers only part of the course, the hard core being correspondence courses and group teaching.

Elsewhere substitute courses are offered. These are for people who are unable to attend university; traditional intra-mural teaching is replaced by a new type of extra-mural instruction, eg that given by the Radio-Universitaires and CNAM.

Lastly, some tele-teaching systems are essentially experimental (for example, Télé-Promotion Cadres Entreprises). Some of these experiments, after a very interesting first phase, will perhaps lead to nothing. Others, such as the Radio-Universitaires in France and the Open University in Great Britain, have assumed the status of institutions.

The publics are varied.

Roughly speaking there are 2 kinds of target-public, corresponding to 2 different educational levels: university and post-graduate.

But this picture would be incomplete without mention of 2 problems: first of all that of the uncommitted listener. Many reports draw attention to the fact that, in addition to enrolled students who take the examinations (if any), there are large numbers of other persons following the courses about whom it would be interesting to know more. Some of these have in fact enrolled for the course; they receive the accompanying documents but do not take the examinations.

There is also an unknown public, which is certainly of considerable size. Moreover, where university courses are concerned there is no doubt that intra-mural students swell the numbers of the unknown public, even though some universities are guilty of "Malthusianism" in this regard. Other universities, more intelligently, encourage their students to follow the radio and TV courses in addition to, and concurrently with, their own intra-mural courses. Some universities even provide their intra-mural students with the accompanying documents.

These various publics are often difficult to define. It must be borne in mind that any tele-teaching course helps to enrich the general culture of all its listeners, who often belong to no definite category and are in any case much less well known and structured than the normal organised university student body. These experiments thereby contribute to continued education at all levels, and should be increasingly considered as national priorities.

Basically, these fringe effects on the potential public point to an unsatisfied need for culture. It is not certain that this need can be satisfactorily met by distant study courses. The problem is that of the distinction between a teaching system and a general cultural campaign serving the purposes of continued education. It would seem there is room for both.

Statutes are important, for it is through them that one discovers who is really responsible for the undertaking.

Some of the experiments are undertaken under the full responsibility of a university. Sometimes universities have been set up specially for the purpose, with courses which bear no relation to those of other universities, whether new or traditional.

In other instances tele-teaching is the responsibility of radio and television organisations.

A third type of statute covers associations set up for tele-teaching operations.

The fourth and last type of statute is that of experimental distant study systems which are governed more or less directly by ministries or ministerial bodies.

Methods and media vary also. Many sponsors of experimental distant study systems start out with the intention of using a single preferred medium, which they regard as superior. It is interesting to note that many of the systems examined here began with precisely this intention. For example, the Radio-Propédeutiques aimed at giving their courses entirely by radio, admittedly providing the student from time to time with a few duplicated documents. The subsequent development of these university radio stations is thus particularly significant. As time went on it was found necessary to use multiple media, accompanying documents and correspondence courses, involving homework and marking. Today only one third of the appropriations in the budget of the Radio-Universitaires is devoted to the production and broadcasting of programmes.

Another practice is now so widespread that it deserves examination: that of bringing students together periodically at the parent university or elsewhere, at intervals that vary from one university to another.

The need to assemble the students is so obvious that the sponsors of the open universities, after studying the extensive experience of other countries, felt that the sessions should be fairly long and that the students should meet in regional or local groups, with tutors present who would help the students to assimilate and understand clearly the knowledge imparted to them and to do the necessary exercises. Courses take place not only during the academic year but also during the Christmas and Easter holidays, and especially during the summer holidays when university premises, vacated by intra-mural students, may be made available to adults wishing to devote all or part of their holidays to study or laboratory work in groups.

With regard to the development of media, it should also be mentioned that use is gradually being made of all the new techniques: for example, flexible records are being used more and more as "accompanying documents" for students, who listen to them at home on their own record players. Thanks to equipment of the video-tape recorder type, or quite simply the 8 mm projector, it will certainly be possible in the not too distant future to send courses or parts of courses to isolated individuals for use at home. It will of course also be possible to obtain documentation and instruction by telephone from certain terminals.

The essential notion that emerges from this methodology and the aids employed is that it is most unusual for only one kind of medium to be used. Invariably a variety of media and a combination of many techniques are employed, and while radio and television play an important role they are by no means the only media used.

They are, however, the media which give the most trouble. Many systems have experimented with various ways of correcting homework, teaching by correspondence

and preparing duplicated documents. Radio and television, on the other hand, are all too often used merely as a means of transport for the communication of information; no thought is given to making the best use of the inherent advantages and possibilities of these techniques. Indeed one sometimes has the impression that the teaching is deliberately made as dry and conventional as that so often offered in establishments of higher education, precisely when a unique opportunity arises for innovation.

This is a promising field for those who wish to experiment in pedagogics. For it is quite certain that it is not enough, especially for the type of public we are dealing with, to broadcast an ex cathedra lecture. Systematic thought must be given to ways of arousing and holding the interest of this adult public: lively, high-quality teaching should be offered, affording a wealth of worthwhile ideas. This can be achieved if teachers, ancient and modern, producers and technicians work together constructively; it is in such co-operation as this that the future of education, and particularly education at a distance, would seem to lie.

The attitude of most teachers to the form given to radio and television programmes may be partly due to the fact that the methods of assessing the students' attainments are all too often the same as those used in traditional education systems.

The measurement of results and the methods of assessment leave much to be desired. Primarily these consist of either examinations or other means of evaluation.

a. Examinations: in many cases there is strict insistence that the examinations should be the same as those taken by students regularly attending courses in colleges or universities; in fact, a new kind of teaching calls at the least for suitably adjusted methods of assessing attainments and new types of examination.

b. Other methods of assessment are used in a number of pilot schemes less subject to pressure by university authorities demanding that tele-teaching courses should end in examinations. An especial effort is made to determine the reactions of the target adult publics to determine the effect of broadcasts by means of surveys, opinion polls and interviews. This is a good way of ensuring the feedback which is vital with tele-teaching, where there is no direct contact with students. But these methods must be used only as a complement to other methods of evaluation if prospective employers are to be provided with an effective guarantee of a student's attainments.

In some cases, attempts are being made to employ ultra-modern knowledge-testing methods involving computers and questionnaires. Such methods are not, of course, sufficient in themselves, but they can be applied in conjunction with other evaluation methods and they do make a teacher's job easier by affording him a clearer picture of his students' knowledge at the beginning and the end of a course as well as of their reactions to his teaching.

The scale and variety of the resources required are such that tele-teaching in higher education calls for, and engenders, many fruitful forms of co-operation between universities. In France, as we have seen, universities are combining their endeavours through inter-university centres, and there is a move towards the establishment of regional federations of universities. Some 50 universities in Germany are keen to co-operate through the VFF. In Sweden, the TRU is supported by all universities.

This co-operation is now going beyond national frontiers. On 16 February 1972, for instance, the Ministers' Deputies of the Council of Europe examined Recommendation 650 on the creation of a European Television University which the Consultative Assembly had adopted on 6 October 1971. The recommendation calls for efforts to promote the creation of a European Inter-university Institute for the Development of Multi-media Distant Study Systems. The Institute would serve the purpose of "complementing and extending the work of European universities and of co-ordinating it in the area of distant study systems (a field in which the universities are often deficient)".

It is emphasised that "such an institution should not be a super-university, but ... should play the role of catalyst in the movement towards the Europeanisation of national universities, and that in addition it should serve as a 'last chance' institution within adult education for all those desirous of overcoming initial handicaps".

The Institute would "permit a joint approach to the problems which face European universities in this field, with a view to reaching quicker and more economical solutions".

As stated in the document adopted by the Assembly, the Institute would not run any courses itself and, consequently, would not award any degree. Its essential function would be to contribute in various ways to the European production of multi-media study systems based on a division of subjects into a number of "credit units" which could be obtained and evaluated separately, so as to meet the needs of permanent education.

Under a plan subsequently drawn up by a specialist working party, the activities of the Institute would revolve round 3 principal functions, which would be implemented gradually, viz:

- documentation on available resources,
- research and information on educational technology,
- co-ordination and co-production of educational soft-ware.

This document, which is reproduced in Appendix E, also considers possibilities regarding the Institute's legal status and discusses its financial, administrative and supervisory arrangements.

It can fairly be said that these various tele-teaching schemes are achieving positive results. The best proof of this is that many of them began as short-term ventures and have since been deemed worthy of being extended and institutionalised. Of course, there is a certain degree of uncertainty about the right form for a teaching system of this kind; but this is not surprising in view of the wide variety of media and methods employed, many of which are original and therefore not able to draw on previous experience.

The results are also positive as regards the publics. At last it has proved possible to reach working people, and in large numbers. And, considering how disappointing night schools and adult education courses have so often been, we may ask ourselves whether, now that working people can be reached by 20th century means of communication, we may not hope for better results. It seems that distant study is one formula, perhaps the ideal one for enabling many people already engaged in working life to increase their knowledge, improve their positions and take advanced courses which they had never been able to start or had been forced to abandon. In this sense distant study may be said to be a valuable instrument for the genuine democratisation of higher education.

It is also encouraging to note that, in addition to this specialised public, a "silent public" is also being formed, many of them uncommitted listeners, known or unknown. Distant study can therefore be considered promising from the point of view of continued education and general culture.

The effectiveness of distant study systems is also encouraging, even if one compares the examination results with those obtained in traditional educational systems. Unfortunately it is not possible to make this comparison for all the cases discussed here which adhere to the practice of assessment and examination. However, one fact that some universities seem quite ready to admit (though less ready to publish, for reasons which it might be interesting to examine) is that the success rate of distant study systems is equal to, if not higher than, the rate attained in the same examinations by students attending university regularly - or assumed to do so.

Some of the figures may be contested, for example by comparing the proportion of students taking the examinations with the proportion of enrolled students. This is a well-known phenomenon, which has been analysed in connection with the Radio-Propédeutiques. Some of the "distant" students, for example, practising teachers, preferred not to sit the examination at the end of the first year, since their work did not leave them enough time to study; however, they did sit it systematically after their second year.

Nevertheless, extreme caution is necessary in estimating the effectiveness of the system. Generally speaking, examination results are all one has to go on; without adequate population statistics (level of education, aspirations etc) any comparison is difficult.

These problems of assessment should be subjected to methodological research from the threefold standpoint of effectiveness, achievements and profitability.

Just how profitable is the system? While no one would deny that it is effective in pedagogical terms, doubts are sometimes voiced as to its cost-effectiveness, as the technocrats would put it. Is not education a national service, which cannot be treated in the same way as a commercial service if one really wants to carry out a cost-effectiveness analysis? Should not the quality of the teaching also be taken into account? Furthermore, one reason why the number of "distant" students is still small is that some universities have remained very restrictive in their attitude and are not very eager, to say the least, to inform the potential public within their ambit that university tele-teaching is there for them to use. On the contrary, deliberate efforts are sometimes made to ensure that as few students as possible avail themselves of the distant study system, even though such systems are justified financially only if they reach a large number of students.

If they do not, then it would be better to send records free of charge to students rather than mobilise a whole radio and television network.

Equally important are the findings that have been made concerning a number of so-called secondary effects. Many of these effects are, in fact, of great importance.

For example, many students have noted that broadcast lectures are better prepared and more polished than those delivered in university lecture halls. And by some curious turn of events distant study systems tend, at university level at any rate, to raise the standard of intra-mural teaching. This is because the feature common to all second generation systems, that is to say all those which make a deliberate choice among media, is that they rationalise the teaching process and make use of so-called "objective" methods.

We have already mentioned the beneficial nature of the contacts which professors and teachers have felt obliged to establish with their extra-mural students and which has subsequently given them a greater desire for such contacts with the students in their classrooms and lecture halls. It is certain that such new attitudes of teachers and students originate in these pioneering educational ventures.

In many cases, at all levels of distant study, new relationships are also being established among teachers. Genuine teams are being constituted, for while ill-conceived radio courses are still too often produced in isolation, such isolated efforts can no longer be contemplated in the case of television and still less in a system which integrates teaching by radio and television with teaching by correspondence. The advent of team-teaching, a necessity for the distant study system, cannot fail to have a beneficial effect on traditional higher education.

There is another side effect which is perhaps mainly of interest to those who have been involved in distant study systems for a number of years. The efforts of teachers and of radio and television organisations need to be joined as closely as possible, and in many systems of distant study a fruitful collaboration has already begun between the university authorities and those in charge of radio and television networks.

In drawing up this balance-sheet we should remember the multiplicity of media and aids: here also the concerted multi-media approach and the combination of audio-visual and other means open up new perspectives for traditional pedagogics. It is regrettable that the same cannot be said of the form taken by radio and television broadcasts, but there is reason to hope that the efforts that have already been made in some quarters will begin to bear fruit in the near future.

What kind of future will this be? It may well be a promising one, both for higher education, where distant study will become more and more important, reaching an ever increasing proportion of students, and for other levels, wherever there is a need to bring continued education to working people in their homes or in the factory.

Every State with a sense of responsibility must initiate more and more distant study schemes, so that the democratisation of education at all levels becomes more than a mere catchword. Indeed, any serious consideration of the problem of democratisation, as it impinges on people already working, makes it clear that modern distant study techniques provide one of the most satisfactory solutions available.

It may be claimed that distant study systems, in whatever country they may be set up and irrespective of the level of education involved, contribute to the constitution of knowledge banks, and it is on such banks that any coherent educational action must be based in the 20th century. Distant study systems will also help greatly to introduce pedagogical innovation into the traditional university.

# BIBLIOGRAPHY

## GENERAL PRINCIPLES AND INTERNATIONAL EXPERIENCE


1. Acts of International Congresses of Broadcasting

   Organisations on Sound and Television School Broadcasting

   - 1st Congress: Rome 3-9 December 1961 - 730 pp.
   - 2nd Congress: Tokyo 9-15 April 1964 - 972 pp.
   - 3rd Congress: Paris 8-22 March 1967 - 702 pp.

2. Administration and planning of audio-visual aids (world conference), in: Visual Education, October 1970, pp. 14-54.

3. "Adult education and television", a comparative study in Canada, Czechoslovakia, Japan - Lewis Miller, Ctibor Tahy, Kanji Hatano. Edited and with a commentary by Brian Groombridge. National Institute of Adult Education - England and Wales, in collaboration with UNESCO - 1966, pp. 128 plus book list.

4. BERVILLE (R): "Emploi de la Radio et de la TV avec les cours d'enseignement par correspondance". In: Acts of the 2nd International Congress of Broadcasting Organisations on Sound and Television School Broadcasting", Tokyo, 1964, pp. 763-770.

5. BIRUKOV (Nicolas): "Les émissions éducatives de télévision des organismes membres de l'Intervision". In: Acts of the 3rd International Congress of the European Broadcasting Union on Sound and Television School Broadcasting, Paris, 1967, pp. 301-310.

6. "Creation of a European Institute for the Promotion of Multi-media Distant Study Systems in Higher Education", Council of Europe report drawn up by the Working Party on Multi-media Distant Study Systems in Higher Education, Strasbourg, 30 September 1972, p. 31.

7. Edström, Lars Olof; Erdos, Prosser, Mars: Education - Studies in Adult Education and Teaching by Correspondence in some developing countries - Stockholm, Almsquist of Wiksell; Dag Hammarskjöld Foundation, 1970, p. 380.

8. "Permanent Education", Council of Europe, 1970, p. 509.

9. Permanent Education (Round Table on), Paris, 18-19 February 1971. Polycopied Council of Europe report, p. 47.

10. "Les Emissions d'enseignement supérieur pour étudiants isolés cherchant à obtenir des diplômes ou des équivalences". Item VII of the Report of the Committee on "Pedagogy and Production". In: Acts of the 3rd International Congress of the European Broadcasting Union on Sound and Television School Broadcasting, Paris 1967, pp. 416-417.

11. Direct Teaching by Television, Council for Cultural Co-operation of the Council of Europe, Strasbourg, 1967, p. 94.

12. GARNIER (R): The forms of organising the co-operation between the Educational Institutions and the TV organs of the Education of Adults in Television and Further Education of Employed. European Specialists' Symposium, Warsaw, 16 September 1968, Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 67-78.

13. GROOMBRIDGE (Brian), ed. Adult Education and Television: A comparative study in Canada, Czechoslovakia, Japan - London, National Institute of Adult Education, in collaboration with UNESCO, 1966, p. 143.

14. HAWKRIDGE (D G): "First steps in constructing a media taxonomy for instructional systems for adults", Council of Europe, 1971, 5 polycopied pages.

15. LEFRANC (R): Radio and television programmes for teacher training. In: Educational Media International, No. 2, 1971, pp. 18-25.

16. LEFRANC (R): Les émissions de radio et de télévision pour la formation des maîtres". Media, No. 23-24, October - November 1971, p. 38-50.

17. MacKENZIE (N), ERAUT (M): Teaching and Learning, an introduction to new methods and resources in higher education: published by the United Nations Educational, Scientific and Cultural Organisation, Paris 1971, p. 209.

18. MacLEAN (R): Television in Education, London, Methuen, 1968, p. 151.

19. MORRIS (A J): University - industry television, radio and telephone links, in: Educational Broadcasting Review, February 1970, pp. 44-52.

20. Moyens Audio-Visuels (Les) dans l'Enseignement Supérieur - Colloque du Centre Audio-Visuel de l'Université libre de Bruxelles. Information brochure, November 1972, p. 173.

21. New Types of Out-of-school Education: Combined Teaching Systems, Council of Europe, Strasbourg, 1968, p. 92.

22. New Types of Out-of-School Education, polycopied report, Council of Europe, Strasbourg, 1970.

23. PAULU (B): Europe's second chance universities, in: Educational Broadcasting, June 1969, pp. 60-81.

24. Public (Le) de RTS Promotion, 1968-69, polycopied report, Division RTS/Promotion et Exploitation, Paris, p. 15.

25. PUGLISI (M G): The use of television in adult education. European achievements, Strasbourg, Council for Cultural Co-operation, 1967, p. 213.

26. Radio-Television Scolaire (La). In: Cahiers Pédagogiques, No. 80, February 1969, p. 100.

27. RAVEN (F): "La TV au service de la promotion sociale". In: Education Nationale, No. 784, 17 March 1966, pp. 11-13.

28. REBEL (K): "Distant study compared with other types of teaching". In: Zeitschrift für Pädagogik, Weinheim, 14 - Jahrg. Heft 5, 1968, pp. 415-434.

29. SAETTLER (P): A History of Instructional Technology - New York - St. Louis - San Francisco etc, McGraw-hill Book Co, 1968, p. 399.

30. SCHRAMM (W), COOMBS (P), KAHNERT (F): The new media: memo to educational planners, published by the United Nations Educational, Scientific and Cultural Organisation, Paris , 1970, p. 172.

31. STASHEFF (Edward): Les émissions d'enseignement supérieur pour isolés, destinées à l'obtention de diplômes ou d'équivalences". In: Acts of the 3rd International Congress of the European Broadcasting Union on Sound and Television School Broadcasting, Paris, 1967, pp. 108-111.

32. Combined teaching systems, polycopied Council of Europe report, Strasbourg, 1969, p. 25.

33. "Multi-media Systems in Adult Education". (12 project descriptions in 9 countries). Internationales Zentralinstitut für des Jugend- und Bildungsfernsehen, 1971, p. 255.

34. TANEM (B): The use of multi-media for teacher training. In: Educational Media International No. 2, 1971, pp. 25-31.

35. Educational Technology. Multi-Media Teaching and Systems Approach. Council for Cultural Co-operation, Council of Europe, Strasbourg, 1971, p. 28.

36. Télévision éducative pour adultes. Special number. In: Revue de l'UER, No. 94 B, November 1965, pp. 11-67.

37. "European Television University", Council of Europe report, 23 September 1971, p. 15.

38. Television and Further Education of Employed. European Specialists Symposium, Warsaw, 16 September 1968, Publishing House of Polish Radio and Television, Warsaw, 1969, p. 200.

39. WEDELL (E G), PERRATON (H D): Teaching at a distance, London, National Institute of Adult Education, 1968.

40. WILTSHIRE (H), BAYLISS (F): Teaching through TV, Nottingham, National Institute of Adult Education, p. 34.

41. ZIGERELL (James J): "Televised Instruction: Where do we go from here?" In: Educational Technology, IX, September 1969, pp. 72-76.

42. ZIGERELL (James J): "Television and Adult Education: Another Lost Cause". In: Educational/Instructional Broadcasting, II, October 1969, pp. 12-14.

43. Comision Gestora de la Universidad libre a distancia (UNILAD), polycopied report, Madrid, 28 April 1972, p. 34.

## CHICAGO CITY TV COLLEGE

44. "Chicago's TV College: A Report of a 3-Year Experiment", Chicago, Chicago City College, 1960, p. 3.

"Chicago's TV College: Final Report of a 3-Year Experiment", Chicago, Chicago City College, 1960.

45. EVANS (Gloria B): "An Audience for Instructional Television: A Comparative Analysis of the Non-credit and Credit Enrollee in Chicago's Television College", Evanston, Illinois, Northwestern University Ph D, Dissertation, 1963.

46. ERICKSON (C G), CHAUSOW (H M), ZIGERELL (J J). 8 years of TV College: A fourth report, Chicago City College, 1964, p. 40.

47. JOHNSON (E): The mass-media and adult education in Malcom. S Knowles (publisher), Handbook of adult education in the United States, 2nd Edition, p. 329, Washington 1969, + bibliography.

48. Maxwell McCombs: "Chicago's Television College": in "New educational media in action": case studies for planners No. 2, 1967, pp. 99-127.

49. "TV College Fact Sheet, 1956-66, Chicago City College" 5 pages. "TV College Retention Study", Chicago City College, 1966, 5 pages of tables.

50. ZIGERELL, (James J): "Chicago's TV College" AAUP Bulletin, March 1967, pp. 49-58.

51. ZIGERELL, (James J): "Das TV College von Chicago", in: Internationale Vierteljahresschrift "Fernsehen und Bildung", 3/4, 1968, pp. 143-153.

52. ZIGERELL, (James J): "What's New in Chicago's TV College", Educational Television, September, 1969, I, pp. 16-18.

53. ALLARD (J): "La radio au Centre National de Télé-enseignement". In: Acts of the International Congress of Broadcasting Organisations on Sound and Television School Broadcasting, Rome, 1961, pp. 536-537.

54. AYMARD (A): "L'enseignement par radio correspondance à la faculté des Lettres et Sciences humaines de Paris", in: Revue de l'enseignement supérieur, No. 4, 1963, pp. 79-84.

55. Bilan des radio-universitaires, polycopied report of the Centre Audio-Visuel (ENS de St. Cloud), 1970.

56. Bilan technique de l'enseignement post-universitaire télévisé, in: Télé-Médecine No. 43 - 23-30 July 1967, pp. 5-7.

57. BONVALET (M): "Utilisation de la TV à l'Institut des spécialités industrielles de Nancy", in: Revue de l'enseignement supérieur, No. 4, 1963, pp. 70-74.

58. Centres (Les) de Télé-Enseignement de l'Est, Information Brochure published by l'Entente interuniversitaire de l'Est, 1971, p. 29.

59. Centre de Télé-Enseignement des Universités de l'ouest, Publication d'Information de Haute Bretagne, 6 avenue Gaston Berger, Rennes 35, p. 8.

60. CNAM: "Emissions d'enseignement supérieur pour isolés destinés a l'obtention de diplômes ou d'equivalences", report to the 3rd EBU Congress, 30 January 1967, p. 3.

61. "Compléments oraux par bandes magnetiques" (langue vivante). Rapport au Ministère de l'Education Nationale. Centre National de Télé-Enseignement, by G Rousseau, 26 December 1969, p. 14.

62. Compte rendu résumé d'un sondage réalisé auprès des auditeurs des émissions téle-CNAM, report of the Centre Audio-Visuel (ENS de St. Cloud), June 1967, 5 polycopied pages.

63. Televised Courses of the "Conservatoire National des Arts et Métiers". In: New Types of Out-of-school Education, Council of Europe, 1968, pp. 11-12.

64. COUSTEIX (N): "L'expérience des radio-propédeutiques", in: ICEF Review, Vol. 2, No. 3, September 1966, pp. 33-38.

65. "Diffusion des cours par TV au niveau de l'enseignement supérieur: compte rendu d'une première expérience réalisée au CNAM par l'équipe de professeurs, administrateurs, techniciens et psychologues", in: Revue de l'enseignement supérieur, Nos. 1-2, 1965, pp. 157-162.

66. Information document on the present state of university tele-teaching in France, polycopied report, Council of Europe, Strasbourg, 1971, p. 15.

67. DUBOST (M): "Etude sur l'auditoire des émissions Télé-CNAM, 1966-67", January 1968, polycopied report of the Centre Audio-Visuel (ENS de St. Cloud), p. 42.

68. DUBOST (M): "Informatique télévisée. Technologie ou mathématiques?" Revue "Zéro-un informatique", October 1968, p. 6.

69. "L'enseignement post-universitaire à la télévision", in: Tonus, No. 410, 2 March 1970, pp. 1 and 6.

70. "Enseignement médical post-universitaire télévisé" (interview with Professor Léger), in: Télé-Médecine, No. 9, 27 November - 4 December 1966, p. 9.

71. "Esquisse d'un bilan des émissions d'informatique fondamental du CNAM", polycopied report of the Centre Audio-Visuel (ENS de St. Cloud), p. 6.

72. FOUCHER (Louis): "Les émissions éducatives et culturelles de la RTF (Radiodiffusion sonore) et l'université", Revue UER (European Broadcasting Union), November 1961, pp. 16-22.

73. HERZLICH (Guy): "L'audiovision dans les facultés. Des expériences multiples et un effort d'équipement systématique", in: Interaudiovision, No. 2, September - October 1965, pp. 14-19.

74. GRANDPIERRE (André): "L'action et les projets du CUCES de Nancy", Revue de Travaux de l'Académie des Sciences Morales et Politiques, 1961, pp. 278-285.

75. LECOMTE (G): "Essai de bilan critique du télé-enseignement dans les universités", an outline report submitted on 4 July 1969, p. 8.

76. LECOMTE (G): "Le télé-enseignement universitaire en France", Media, No. 14, June 1970, pp. 38-40.

77. LEFRANC (R): "Les techniques AV au service de l'enseignement supérieur, bilan et perspectives", Revue de l'enseignement supérieur, 1963, pp. 9-21.

78. LEFRANC (R): "Les modalités de la coopération universités-RTF en vue de l'extension de l'enseignement supérieur français", in: Acts of the 2nd International Congress of Broadcasting Organisations on Sound and Television School Broadcasting, Tokyo, 1964, pp. 385-390.

79. LEFRANC (R): "Emploi de la radio et de l'enseignement par correspondance dans l'enseignement supérieur: l'expérience des radio-propédeutiques". In: Acts of the 2nd International Congress of Broadcasting Organisations on Sound and Television School Broadcasting. Tokyo, 1964, pp. 771-777.

80. LEFRANC (R): "Distant study systems at university level in France", polycopied report of the Council of Europe, Strasbourg, December 1971, 29 pages, Ref. CCC/ESR (71) 90.

81. LEFRANC (R): "Le Télé-Enseignement Universitaire en France", polycopied report to the Colloquy organised by the Centre Audio-Visuel de l'Université libre de Bruxelles, November 1972, 36 pages.

82. LESNE (N): "L'experience du CNAM - Paris", in: Television and Further Education of the Employed, European Specialists' Symposium, Warsaw, 16 September 1968, Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 153-157.

83. MAILLET (J): Organisation du Régime Spécial en Histoire des faits économiques: information brochure, Faculté des Sciences Economiques, Université des Sciences Sociales, undated, p. 12.

84. Note sur le CUCES, Coopération, No. 10, October 1962, pp. 35-37.

85. "Nouveau (Le) Plan Audio-Visuel (1967-70) de l'Education Nationale, France", in: Interaudiovision, No. 10, January 1967, p. 11.

86. NOZET (H), POLY (A), BEILLARD (O), DEVANZ (J): "Etude des différents aspects de l'enseignement par TV au CNAM", report of the Centre Audio-Visuel (ENS de St. Cloud), 1965.

87. NOZET (H), DUBOST (M): "Etude du rythme de cours télévisés de mathématiques ou de cours faisant appel a cette discipline, comparaison d'émissions diffusées en direct avec des émissions enregistrés au préalable sur film", report of the Centre Audio-Visuel (ENS de St. Cloud), 1965, 38 polycopied pages.

88. NOZET (H), DUBOST (M): "Etude comparative de l'enseignement télevisé et de l'enseignement donné en amphithéâtre au CNAM à propos d'un cours de radio-électricité du professeur Bernard", report of the Centre Audio-Visuel (ENS de St. Cloud), 61 polycopied pages, 1965.

89. NOZET (H), DEVANZ (J): "Etude du comportement des élèves suivant les cours télévisés de radio-électricité et de mathématiques préparatoires du CNAM", report of the Centre Audio-Visuel (ENS de St. Cloud), 40 polycopied pages.

90. OLMER (P): "Le Centre Universitaire de Coopération économique et sociale de Nancy", Revue de l'enseignement supérieur, No. 4, 1956, pp. 47 and 59.

91. PAILLE (A): "A propos des émissions médico-chirurgicales télévisées", Télé-Ovale, No. 122, October 1969, p. 3.

92. "Plan d'extension des moyens audio-visuels" 1967-70, report of the Ministry of Education, 50 polycopied pages.

93. "Les Radio-Propédeutiques", report of the Centre Audio-Visuel of St. Cloud, 1972, 64 polycopied pages.

94. "Rapport de synthèse des expériences menées au CNAM (1963-68), polycopied report of the Centre Audio-Visuel of St. Cloud, 1972.

95. "Radio télévision Universitaire en France", in: Report of the European Broadcasting Union, Paris, 1967, Commission II, Part I.

96. SCHNEIDER (J), SIMON (M): "Expérience en cours aux Facultés des Lettres et Sciences Humaines de Nancy et de Strasbourg", in: Revue de l'enseignement supérieur, No. 4, 1963, pp. 90-91.

97. SCHWARTZ (B): "Deux conférences sur l'éducation moderne: transformation de l'enseignement à l'Ecole des Mines de Nancy", Le Centre Universitaire de coopération économique et sociale, Cahiers pedagogiques, No. 60, April 1966, pp. 8-32.

98. "Télé-Médecine": publication hebdomadaire des fiches d'émissions post-universitaire médical. Various articles on this experiment.

99. VALERIEN (M J): "Les Emissions d'enseignement post-universitaire médical", in: "Confrontations médico-chirurgicales de Vichy", sitting of 5 November 1969, pp. 4-7.

100. VEDEL (G): "Expérience projetée à la faculté de Droit et des Sciences Economiques de Paris", in: Revue de l'enseignement supérieur, No. 4, 1963, pp. 85-89.

GREAT BRITAIN


101. BARBEY (G): "A l'Université ouverte en Grande-Bretagne", in: Media, No. 8, December 1969, pp. 19-27.

102. BELL (Robert): "Thinking about the Curriculum" - The Open University Press, 1971, 45 pages.

103. CONNORS (B): "L'emploi des moyens audio-visuels dans l'Université ouverte", polycopied report, the Colloquy organised by the Centre Audio-Visuel de l'Université libre de Bruxelles, November 1972, 14 pages.

104. Curriculum (The): Context, Design and Development - Broadcast Notes (Radio) unit I - Course Notes, units I to 3, published by the Open University, 1972, 18 pages.

105. Distant Study Systems in Higher Education in the United Kingdom, polycopied report, Council of Europe, Strasbourg, 1971, 20 pages.

106. DOWDESWELL (W H): "Inter-University Biology Teaching Project" in Journal of Biological Education, No. 4, 1970, pp. 197-203.

107. "Early (The) Development of the Open University", report of the Vice-Chancellor, The Open University, January 1969 - December 1970-72, 176 pages.

108. "Guide for applicants for undergraduate courses, 1973", The Open University, 1971, 37 pages.

109. HAWKRIDGE (D C): "Council of Europe Symposium: the Open University - A case study in Educational Technology", 1970, 37 pages.

110. HAWKRIDGE (D C): "Applications of Educational Technology at the Open University", polycopied report, 1971, 10 pages.

111. HAWKRDIGE (D C): "A Summary of the Instructional System used by the Open University in Great Britain in 1971, polycopied report, 1971, 10 pages.

112. Introduction and Guide to the Course, published by the Open University Press, 1971, 14 pages.

113. LEFRANC (R): "L'Université ouverte de Grande-Bretagne", in: Bulletin du Centre National de Télé-Enseignement, Paris, No. 1, 1970, pp. 27-31.

114. LEWIS (Brian N): "Course production at the Open University:

I - Some basic problems
2 - Activities and activity networks", 23 pages.

115. McCLOY: The post-graduate education of doctors on BBC TV, in: EBU Review, 112 B, 12-15 November 1968.

116. MARKS (L): University of the Second Chance, in: The Observer, 16 February 1969.

117. Open University (The): Prospectus 1972, London - Edinburgh, Morrison and Gibb, 1970, 143 pages.

118. Open University (The) Study Guide, Foundation Courses 1971, The Open University Press, 1970, 139 pages.

119. Open University (The): Report of the Planning Committee to the Secretary of State for Education and Science, London: Her Majesty's Stationery Office, 1969, 33 pages.

120. PERRATON (H D): Communications and University Teaching - a report by the Inter-University Research Unit, Cambridge, 1971, 48 pages.

121. PERRATON (H D), WADE (D A), FOX (J W): Sinking Universities by Technology, a report prepared for the Working Party on Inter-University Communication by the Inter-University Research Unit, Cambridge, National Extension College, 1969, 83 pages.

122. SCUPHAM (J): The Role of Television and Radio Broadcasting in Providing Wider Access of Persons in Employment to Further Education, particularly at the University Level.

123. Television and Further Education of Employed, European Specialists' Symposium, Warsaw, 16 September 1968, Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 100-114.

124. Study Guide Supplement, The Open University, 1970, 30 pages.

125. Television and Post University Training - BBC Educational Broadcast, in Television and Further Education of Employed, European Specialists' Symposium, Warsaw, 16 September 1968, Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 114-118.

126. University (A) of the Air, London, HMSO, 1970, 8 pages..

127. The Open University, in: New Types of Out-of-school Education, Council of Europe, 1968, pp. 19-20.

JAPAN NHK (Nippon Hoso Kyokai: Japanese Radio and Television)

128. Educational Broadcasts of NHK, Japan Broadcasting Corporation, Tokyo, Japan, October 1970, 36 pages.

129. "Formation professionnelle et émissions télévisées".

Communication of NHK, Japan. In: Acts of the International Congress of Broadcasting Organisations on Sound and Television School Broadcasting, Rome 1961, pp. 381-383.

130. KOMADA (Kinichi) - Development of Adult Education in Japan: Japanese National Commission for UNESCO, 1966.

131. NAKAJMA (Iwao): "The Broadcasting Industry in Japan; its Historical, Legal and Economic Aspects". In: "International studies of broadcasting", 1971, pp. 15-18.

132. "NHK Correspondence Education Broadcast". Published by Nippon Hoso Kyokai (Japan Broadcasting Corporation), 23 pages.

133. "NHK today and tomorrow": Educational Broadcast of NHK. Japan Broadcasting Corporation, Tokyo, 1968, 43 pages.

134. NISHIMOTO (Mitoji): "The development of educational broadcasting in Japan - Tokyo, Sophia University in co-operation with C E Tuttle Co, 1969, 287 pages.

135. "Social Education Programmes - NHK". In: Television and Further Education of Employed. European Specialists' Symposium, Warsaw, 16 September 1968. Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 157-164.

136. Survey and Study of Educational Broadcasts (1960-1968) by the Japan Broadcasting Corporation, 1969, 32 pages.

137. "La Télévision et l'enseignement des Sciences". Communication of NHK, Japan. In: Acts of the International Congress of Broadcasting Organisations on Sound and Television School Broadcasting, Rome 1961, pp. 378-380.

138. "This is NHK 70" - (Japan Broadcasting Corporation) Uchisaiwaicho, Chiyoda - Ku - Tokyo, Japan, 1970, 55 pages.

139. TOSHIZO (Ohko): "L'emploi de la Radio et de la TV dans les cours par correspondance". In: Acts of the International Congress of Broadcasting Organisations on Sound and Television School Broadcasting, Tokyo, 1964, pp. 780-798.

NETHERLANDS

TELEAC

140. TV broadcasts for the continued education of surgeons. TELEAC. Mimeographed report; not dated, 5 pages.

141. Educational television (Instructieve televisie). Aspects of guidance: by Rudolf Engers. TELEAC publication, Utrecht, 1970, 48 pages.

142. Learning French by television "En français", course adapted by TELEAC, the Netherlands. Brochure intended for the participants at the congress held in the "Internationales Zentralinstitut für Jugend- und Bildungsfernsehen" at Munich. Utrecht 1971, 6 pages.

143. Münchner Informationswoche. En français. TELEAC, the Netherlands. Utrecht 1971. Mimeographed brochure, 12 pages.

144. Dutch Television Academy TELEAC. Summary of the Annual Report, January 1968 - June 1969. Mimeographed report, 31 pages.

145. What is TELEAC? Mimeographed report. Delft Public Relations 1967, 8 pages.

VAN PRAAG (H), Permanent Education. Mimeographed report. TELEAC Utrecht, 12 May 1970.

VAROSSIEAU (J W). Audio-visual experiments in the Netherlands. Mimeographed report distributed at the colloquy held by the Audio-Visual Centre of the Free University of Brussels in November 1972, 5 pages.

Multi-Media Systems in Adult Education. Chapter on TELEAC (pp. 138-150). Publisher: Internationales Zentralinstitut für das Jugend- und Bildungsfernsehen in München.

Educational broadcast, an urgent plea (Onderwijs omroep, een dringend pleidooi). Muusses Purmerend 1972.

POLAND Pilot project for the higher technical education of the employed.

146. CASSIRER (H R): "Television Extends Higher Education: A pilot project in Poland" - UNESCO Chronicle, XII: 9 (1966).

147. DERENTOWICZ (Mieczyslaw): "The Studies for the Employed in Poland and the use of TV for this extension". In: "Television and Further Education of Employed" - European Specialists' Symposium, Warsaw, 16 September 1968. Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 19-25.

148. "Television for higher technical education of the employed - A first report on a pilot project in Poland". Reports and Papers on Mass Communication, No. 55: UNESCO, 1969, 49 pages.

149. "Televised lectures as aids to higher technological studies for the employed" - Polish Radio and Television. In: Television and Further Education of Employed. European Specialists' Symposium, Warsaw, 16 September 1968. Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 174-180.

150. TYMOWSKI (Januoz): "Distant Study Systems in Higher Education in the People's Republic of Poland". Committee for Higher Education and Research. Report of the Council of Europe, Strasbourg, 7-8 December 1971, 10 pages.

151. TYMOWSKI (J): "Television Polytechnic in Poland". Polycopied report (undated), 17 pages.

152. University of the Air. In: The Times Educational Supplement, 9 September 1966.

153. WINKIEL (W): "The problems of adult education in Poland". In: Szkola Zawodowa, Warsaw, No. 2, February 1970, pp. 10-15. Analysis taken from CIRF Abstracts, No. 4, 1970, Ref. B36147.

FEDERAL REPUBLIC OF GERMANY


154. Bavarian Broadcasting Service. The Telekolleg. In: Progrès et Expériences. April 1969.

155. DOHMEN (G): Der besonders charakter eines Fernstudiums in Rahmen der Lehrerfortbildung. In: Die Realschule, 75 - Jahrg., Heft 2, 1967, pp. 49-51.

156. DOHMEN (G): "Academic home studies (Fernstudien) for teachers based on multi-media systems (in view of updating and upgrading). Polycopied report, 1970, 18 pages.

157. DOHMEN (Günther): Multi-media distant study systems: Lightening the load of the universities and encouraging reform. Weinheim, Beltz, 1970, Vol. 4.

158. DOHMEN (Günther): "Fernstudium in Medienverbund". Verlag Julius Beltz - Weinheim, Berlin - Basel, 1970, p. 98.

159. DOHMEN (Günther): "Reformanstösse für die Hochschulen durch Fernstudien?". Konstanzer Blätter für Hochschulfragen, February 1971. Druckerei und Verlagsanstalt Konstanz Universitätsverlag, GMBH, pp. 5-13.

160. DOHMEN (Günther), PETERS (Otto): "Hochschulunterricht im Medienverbund. Teil 1. Probleme, Projekte, Pläne". Athenäum Pädagogischer Verlag Schwann Ferdinand Schöningh. VDI - Verlag - Verlagsgesellschaft Rudolf Müller. Quelle und Meyer, 1971, 202 pages.

161. DOHMEN (Günther), PETERS (Otto): "Hochschulunterricht im Medienverbund. Teil 2. Didaktische Aspekte". Athenäum Pädagogischer Verlag Schwann Ferdinand Schöningh. VDI - Berlag - Verlagsgesellschaft Rudolf Müller - Quelle und Meyer, 1971, p. 236.

162. EHMANN, GERKEN, HALBERSTADT: "Multi-media distant study systems". Bonn, Arbeitsgemeinschaft Deutscher Studentenschaften, 1969, 40 pages. (Schriftenreihe der ADS, N6.)

163. FRITSCH, HALBERSTADT, KLOPHAUS, KOOP, SCHWARZ, STAHL: "Fernstudium in Medienverbund - Projektbeschreibungen" Blickpunkt 14, 1971, 102 pages.

164. HOLZAMER (K): Television University - First reflexions on a project of the German Television II. In: Review of the European Broadcasting Union, No. 115 B, May 1969, pp. 10-11.

165. Information about the Educational Broadcasts provided especially for instructional Purposes of Further Education of Adults - German Democratic Republic. In: Television and Further Education of Employed. European Specialists' Symposium, Warsaw - 16 September 1968. Publishing House of Polish Radio and Television, Warsaw, 1969, 200 pages, pp. 168-172.

166. "Mediensysteme in der Erwachsenenbildung". Internationales Zentralinstitut für das Jugend- und Bildungsfernsehen, 1971, 252 pages.

167. MERKBLATT - Für Fernstudienlehrgänge der Lehrerfort- und -weiterbildung, 1972. Polycopied report, 23 pages.

168. REBEL (Karlheinz): Modelle der Kooperation von wissenschaftlichen Hochschulen und Rundfunkanstalten". In: "Neue Sammlung". September - October 1970. Vandenhoech und Ruprecht in Göttingen, pp. 459-470.

169. Sekretariat der Kultusministerkonferenz. Fernstudium im Medienverbund (Empfehlungen des Vorbereitungsausschusses). Bonn 1970, 30 pages.

170. SILBERMANN (Alphons): "Jahresbericht 1970", 16 polycopied pages.

171. Distant study systems in higher education in the Federal Republic of Germany. Polycopied report, Council of Europe, Strasbourg, 1971, 5 pages. (CC/ESR (71) 63).

172. REBEL (Karlheinz) (translated and arranged by): "Individualisierte Lernprozesse - Korrespondenz - Studium und Lehrerausbildung in den USA" Teil 1: Verlag Julius Beltz - Weinheim, Berlin - Basel, 1969, 168 pages.

173. ZSCHEILE (W): "Educational Programmes for Adults of the Television of the German Democratic Republic". In: Review of the International Radio and Television Organisation, No. 2: 16-21, 1965.

174. Brunzell-Franz- daf. Audio-visual aids in the Swedish university systems. TRU (undated), 8 pages.

175. Facts about TRU. TRU Ref. No. 16/17 February 1971, 4 pages.

176. EDFELDT (Dr. Ake W): Report on adult education course in business economy. Council of Europe Munich Seminar 1970, 20 pages.

177. Investigation of video-tape recorders for educational purposes. In: TRU No. 3, February 1970, 89 pages.

178. A Presentation of a Swedish multi-media project. Polycopied brochure. TRU (undated), 7 pages.

179. Summary of the results of the preparatory meeting for the foundation of a Nordic Working Party for Developing a Multi-Media System for Adult Education. Polycopied report - TRU (undated), 10 pages.

180. "Vi Kaller Dom U Lainder". A presentation of an instructional package about developing countries. TRU, Ref No 17/71 February 1971, 3 pages.

## BIBLIOGRAPHICAL SUPPLEMENT


181. Universidad Nacional de Educacion a Distancia: Cuadernos de Information. Servicio de Publicaciones del Ministerio de Educacion y Ciencia - Madrid 1972 - 32 pages.

182. Curso de orientacion para el acceso directo a la UNED de mayores de 25 anos. Universidad Nacional de Educacion a Distancia - Madrid 1973 - 10 pages.

183. Centros Regionales. Universidad Nacional de Educacion a Distancia - Madrid 1973 - 28 pages.

184. Guia del alumno. Universidad Nacional de Educacion a Distancia - Madrid 1973 - 36 pages.

185. The Fourth Revolution. Instructional Technology in Higher Education. Report by the Carnegie Commission on Higher Education. McGraw-hill Book Company - Hightstown - New Jersey - 1972 - 110 pages.

186. La technologie de l'enseignement. Conception et mise en oeuvre de systèmes d'apprentissage. OCDE - CERI - Paris 1971 - 88 pages.

187. WAGNER (Leslie): The economics of the Open University in higher education, Elsevier Publishing Company, Amsterdam, 1972 - pp. 159-183.

# APPENDICES

# APPENDIX I

## I - RECAPITULATORY TABLE OF THE SYSTEMS ANALYSED

APPENDIX 1

| | [illegible] AUDIO-VISUAL [illegible] CENTRE (France) | FERN-UNIVERSITÄT HAGEN EDUCATION (France) | OPEN UNIVERSITY (Great Britain) | [illegible] FERNSTUDIEN (Federal Republic of Germany) | [illegible] UNIVERSITY III RADIO-TELEVISION (France) | RADIO-UNIVERSITEIT [illegible] AND VRIJE (France) | OTELO (1) (Netherlands) | TELE-TAUS (France) | UNI (Sweden) (1) | UNED (Spain) (2) | UTU (Federal Republic of Germany) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. [illegible] | 1st law degree | Further training and refresher courses for medical practitioners | University education at all levels | Further training and refresher courses at university level | Preparation for [illegible] and [illegible] in English | Preparation for [illegible] and often for [illegible] and [illegible]<br><br>Further training | Further training and refresher courses<br><br>Non-formal education | Formal and non-formal higher technical education<br><br>Non-formal education | Further training and refresher courses<br><br>Non-formal education | Full university programme | University teaching |
| 2. [illegible] | Students in employment or unable to pursue regular studies at university | Medical practitioners<br><br>Para-medical staff | Students over 21, either in employment, unable to attend university or not admitted to the traditional universities | Adults in employment<br><br>Students | Students in employment and unable to attend university regularly | Students in employment or unable to attend university | Adults in employment | Adults in employment<br>High proportion of technicians | Adults in employment | Students in employment or not admitted to traditional universities | Students and interested adults |
| 3. [illegible] | Inter-University Centre | Association | University in full sense | Association of radio and television stations, [illegible], universities and ministries of education | Education and research unit of university | University and sometimes inter-University Centres | Bureau of Radio and Television Organisations | Part of establishment of higher education | Committee of Ministry of Education | University in full sense | Association of ministries, universities, [illegible] and radio and television stations |
| 4. [illegible] | Specialist department of university | Office of Association | Central services<br>Institute of Educational Technology<br><br>13 regional centres<br>Local centres | Managed by radio/TV stations and [illegible] | Specialist department of university | Specialist university departments | Co-operation between Netherlands Radio and Television Organisation (NOS) and [illegible] | Specialised central department of CNAM<br><br>Associated regional centres | 6 departments | Not yet determined<br><br>- national centre<br>- local centres | Managed by [illegible] |
| 5. [illegible] and [illegible] | Radio<br>Correspondence<br>Practical work<br>Written work under supervision of university | Television<br><br>Technical notes | Multi-media system<br>Correspondence<br>Group sessions and vacation centres<br>Tutoring | Multi-media approach<br><br>Correspondence | Radio<br>Correspondence<br>Practical work<br>Written work under supervision | Radio<br>Correspondence<br>Periodical group sessions at university | Radio and television and regular use of other media | Television<br>Correspondence courses<br>Group sessions in centres | Radio and television<br><br>Multi-media system | Group work<br><br>Multi-media | Multi-media system |
| 6. [illegible] | Radio:<br>Planned by centre, produced by [illegible]<br><br>Other material produced by university | Television:<br>Audio-Visual Centre (BBC St. Cloud)<br><br>Technical notes published in medical journals | Radio-Television:<br>Planned by Open University, produced by BBC<br><br>Other materials produced by Open University | Programmes produced by radio stations<br><br>Other material by [illegible] and publishing houses | Planned by university, produced by [illegible] | Radio: in 3 cases university responsible for entire production; in 11 cases, planning by university, production by [illegible]. Other material produced by university | Planned by OTELO, produced by [illegible] | Television:<br>planned by TELE-TAUS, produced by [illegible]<br><br>Other materials: CNAM | TRU | Radio and television:<br>planned by UNED, produced by Spanish RTV<br><br>Other material: not yet determined | Radio and television:<br>programmes produced by radio/TV stations<br><br>Other material produced by [illegible], universities, publishing houses |
| 7. [illegible] of [illegible] | Continuous assessment and<br>Final examination | None | Continuous assessment and<br><br>Final examination | Continuous assessment and<br><br>final examination | Continuous assessment and<br><br>state competitive examinations | Continuous assessment (Correctional final) university examination | Surveys and assessment | Continuous assessment<br><br>Final examination for formal technical studies | Surveys and assessment | Continuous assessment<br><br>Examinations | Continuous assessment and periodical examinations |
| 8. [illegible] and [illegible] | University law degree | None | University degree (BA) | Special diploma | [illegible]<br>Licentiate | [illegible]<br>Licence<br>Maîtrise | None | CNAM diploma for formal technical studies | None | University degrees | University degrees |

(1) University level; post-university for part of the instruction.

(2) Called UNIAD in the planning stage.

# APPENDIX II

II

A. Extracts from the statute of the Open University

B. Decree establishing UNED

C. Extracts from the statutes of Centres de Télé-enseignement Universitaire (CTEU)

D. Extracts from the statute of the Verbund für das Fernstudium

E. Projected European Inter-university Institute for the Development of Distant Study Systems.

## APPENDIX II A

"The executive governing body of the University is the Council which has ultimate responsibility for the conduct of all University affairs and, in the words of the Charter, for 'advancing the interest of the University, maintaining its efficiency, encouraging teaching, the pursuit of learning and the prosecution of research therein'. The Council meets at regular intervals and is concerned largely with the administration of the finances and business affairs of the University.

The members of the Council are drawn from both inside and outside the University, with representatives from the academic staff (and later from the students), from institutions of both higher and further education, and from the BBC. There are also a number of members whose work is not directly connected with education but whose outstanding achievements in their own fields enable them to make a valuable contribution to the administration of the University."

The Council's powers are very extensive, as may be seen from the following clauses:

"5. Subject to the provisions of the Charter, to make Statutes.

6. On the recommendation of the Senate and with the approval of the Academic Advisory Committee (while that Committee exists) to authorise the creation of academic posts in the University.

7. On the recommendation of the Senate and with the approval of the Academic Advisory Committee (while that Committee exists) to institute Degrees ....

11. To regulate the appointment of all other members of the University staff, and to supervise the salaries and conditions of tenure of posts to which it appoints.

12. On the recommendation of the Senate, and with the approval of the Academic Advisory Committee (while that Committee exists) to establish the organs of academic administration, to prescribe their constitution and functions, and to modify or revise the same ....

14. To review the work of the University and, subject to the powers of the Senate, to take such steps as it thinks proper for the purpose of advancing the interests of the University, maintaining its efficiency, encouraging teaching, the pursuit of learning and the prosecution of research therein ....

18. To govern, manage and regulate the finances, accounts, investments, property, business and all affairs whatsoever of the University, and for that purpose to appoint a Finance Committee with a constitution and delegated powers as determined by the Council, Bankers and any other officers or agents whom it may seem expedient to appoint, provided that before determining any question of finance which directly affects the educational policy of the University the Council shall first seek and consider the views of the Senate...

20. To sell, buy, exchange, lease and accept leases of real and personal property on behalf of the University.

21. To provide and maintain the buildings, premises, furniture, apparatus, services and other means needed for carrying on the work of the University ....

28. Generally to exercise all such powers as are or may be conferred on the Council by the Charter and these Statutes, including the power to make Ordinances in the exercise of the powers expressly set out in this Statute and of all other powers vested in the Council.

The composition of the Senate provides for representation of the full-time academic staff, the part-time tutorial staff and the educational technologists, all of whom are developing the University's new teaching methods. The Senate is

responsible for the academic work of the University, directing and regulating the teaching and research and controlling all matters connected with examinations and the award of degrees. In early years, as in all new universities, academic decisions relating to the maintenance of academic standards are also the concern of the Academic Advisory Committee which is appointed by the Privy Council." (1)

The Statutes also provide as follows:

"16. The Senate shall be the academic authority of the University and shall, subject to the powers reserved to the Council by the Charter and these Statutes, take such measures and act in such a manner as shall appear to it best calculated to promote the academic work of the University both in teaching and research by the divers means described in Article 3 of the Charter. The Senate shall, subject to the Charter and these Statutes, in addition to all other powers vested in it, have the following powers:

1. to regulate and control all teaching, courses of study and the conditions qualifying for admission to the various titles, degrees and other distinctions offered by the University;

2. to regulate the admission of persons to courses of study and their continuance therein;

3. to advise the Council on the establishment of such academic bodies as may be required;

4. to appoint members of the Senate to be members of the Council as provided for under Statute II;

8. to regulate all University examinations and to appoint examiners whether internal or external, provided that the conditions of appointment and service of external examiners shall be subject to the approval of the Academic Advisory Committee (while that Committee exists);

9. to recommend the institution of Degrees, subject to the approval of the Academic Advisory Committee (while that Committee exists);

10. to grant distinctions including Honorary Degrees;

11. to grant Degrees and other academic distinctions to persons who shall have pursued in the University a course of study approved by the Senate and shall have passed the examinations of the University under the conditions laid down in the Regulations ....;

25. Generally to exercise all such powers as are or may be conferred on the Senate by the Charter and these Statutes including the power to make Regulations in the exercise of the powers hereinbefore expressly set out in this Statute and of all other powers of the Senate."

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(1) 117, p. 18.

## APPENDIX II B

### Decree 2310/1, 1972, of 18 August, instituting a National Distant Study University

Given the need to develop one of the basic principles of educational reform, namely equality of opportunity, ways must be found of making access to higher education easier for all those who are prevented by their place of residence, by professional obligations or for any other reason from attending university.

Of all the methods available, the distant study method has been judged the most suitable, since it alone can ensure the necessary flexibility without prejudicing the quality of the teaching itself.

The characteristics of the distant study method, as compared with the conventional approach, are so specialised in terms not simply of technical and methodological, but also of administrative, organisation that it is inadvisable to impose this burden on existing universities. Accordingly the law approving the Third Development Plan authorises the government to establish by decree a national distant study university, whose field of action will cover the entire national territory.

Following the completion of the requisite preliminary studies by the Administrative Commission set up under Order 1106/1971 of 6 May, in accordance with the authorisation contained in final clause 4 of the law approving the Third Development Plan, on the proposal of the Minister for Education and Science and following the Council of Ministers; decisions of 18 August 1972,

I ordain as follows:

Article 1

1. The National Distant Study University, possessing full legal status and its own material resources, shall be established in conformity with the provisions of the General Education Law.

2. The National Distant Study University shall dispense instruction by means of radio, television, sound tapes, video tapes and all similar media and shall supervise the work of students through correspondence, periodic meetings at regional centres and any other suitable arrangements.

3. Progress assessment, conferring of degrees, development of research, circulation of research findings and, in general, all functions which normally devolve on an academic institution shall be organised in the National Distant Study University in a fashion consistent with the special features of the teaching it provides.

4. The National Distant Study University shall be managed in accordance with the provisions of the General Education Law, the present Decree and its own Statutes, which shall be drafted by the Rector and the Administrative Commission, after consulting the Board of Governors, and approved in accordance with the form laid down in Article 66/1 of the General Education Law.

Article 2

1. The National Distant Study University shall operate throughout the national territory, its headquarters being in Madrid and shall be provided with regional centres necessary to the fulfilment of its tasks; they shall be directly dependent on it and cover geographical areas which will not necessarily coincide with the present university districts.

2. The regional centres shall be established by order of the Ministry of Education and Science, after consulting the Rector of the district in which the centres are to be located.

Article 3

1. All students who satisfy the current statutory requirements for university entrance and who are resident in the national territory, or even outside if they have Spanish nationality, shall have access to the National Distant Study University.

2. Preferential admission to courses at the National Distant Study University shall be granted to students who normally reside in parts of the national territory where they cannot pursue such courses in ordinary centres, either because there are no centres for the specialisation of their choice or because existing centres lack sufficient places to satisfy all the applications for enrolment.

3 The Ministry of Education and Science shall issue rules governing the admission to the National Distant Study University of Spanish students resident outside the national territory and shall take the necessary steps to facilitate continuation of their studies.

Article 4

1. The National Distant Study University shall initially be composed of faculties of philosophy and letters, science, law and economic and labour science.

2. The choice of departments and the subjects included in them shall be made by the Ministry of Education and Science.

Article 5

1. The syllabuses of the various faculties shall be designed to fit in with those in other universities. The provisions of Article 37 of the General Education Law shall be applied in approving them.

2. Students shall complete the practical exercises associated with the various syllabuses within the time-limits and in the form specified in each case.

Article 6

1. The government and representatives of the National Distant Study University shall consult one another through the academic bodies referred to in Article 76 of the General Education Law, which shall include, in accordance with paragraph 4 of the said article, a technical director and a co-ordinator of regional centres.

2. The statutes of the National Distant Study University shall specify the competence of the various bodies, their composition and the procedure for appointing their members, without prejudice to the following article and in accordance with the General Education Law, insofar as the latter covers these details.

Article 7

1. The Board of Governors of the National Distant Study University shall be set up in the form specified in Article 83 of the General Education Law, insofar as the latter is applicable. Members who would normally be nominated by bodies not yet constituted or which cannot be consulted because of the university's nation-wide range shall be appointed by the Minister for Education and Science from circles representing the corresponding categories.

Article 8

1. The National Distant Study University shall have its own academic staff drawn from the various disciplines, as well as lecturers under contract.

2. To help increase the effectiveness of its work, the National Distant Study University shall also have Directors of Regional Centres and tutors bound to the university by contract and recruited from holders of doctor's degrees. In recruiting,

priority shall be given to officials of the civil service and particularly to members of the various teaching bodies. These officials shall retain their own posts, provided that the new duties entrusted to them are not incompatible with those which they already exercise in their own spheres of activity.

3. The work of the tutors shall be carried out in close liaison with the corresponding department of the National Distant Study University.

Article 9

1. Before the National Distant Study University comes into operation, the Ministry of Education and Science shall prepare a list of teaching staff and shall settle the number of Chairs and lectureships to be allocated in the various categories.

The setting-up of the National Distant Study University shall entail no increase in the appropriations for the Ministry of Education and Science fixed by Law 14/1960.

Article 10

1. The National Distant Study University shall co-operate with other universities by making its facilities available to them.

2. The other universities shall in turn make available to it all their facilities and all the resources which it may need to exercise its functions more effectively, particularly with regard to practical work, and without prejudice to the normal development of their own activities.

3. In implementation of the above paragraphs, the corresponding agreements shall be prepared by the respective rectors.

4. Co-ordination between the National Distant Study University and other universities shall in all cases be effected by the General Directorate of Universities and Research through the Council of Rectors, acting as a standing committee of the National Junta of Universities.

Article 11

The present decree shall come into force on the day following its publication in the Official Gazette.

Be it so ordained by this decree, promulgated at Corunna on 18 August 1972.

F FRANCO

Minister for Education and Science

José Luis Villar Palasi

## Order of 14 December 1972 approving the Curriculum of the National Distant Study University for its first year of operation

The National Distant Study University was established, on the strength of the authorisation contained in the law approving the Third Development Plan, by Decree 2310/1972 of 18 August. Since the university is soon to be opened, it is necessary to decide what subjects will be taught during the first year of operation, it being understood that it will thereafter be responsible for deciding its own curriculum in accordance with Article 31.1 of the General Education Law and this Ministry's Order of 23 September last relating to the framing of higher education curricula.

Besides, given the innovatory character of this university experiment, a measure of flexibility will be necessary, at least initially; thus the individual subjects should not be considered as forming part of the academic courses and the subject, or subjects chosen by the student in his first year will not have a selective character.

1. The number of subjects for which a student can enrol every year should reflect the time which he can devote to study. The university will therefore tell him in advance how many hours of study are needed every week for each subject, and the student will be required to indicate in his application for enrolment, the total time which he can devote to study.

The university may revise the student's application for admission, restricting it to the number of subjects which he can follow with the time at his disposal.

2. The subject, or subjects, which a student chooses to study in his first year will not have a selective character. Priorities as between subjects will be decided in the light of compatibilities.

3. The subjects which the National Distant Study University will teach in its first year of operation, and which do not belong to specific academic courses, are as follows:

A. Faculty of Philosophy and Letters

Spanish language and literature
Latin language and literature
Greek language and literature
Introduction to philosophy
Universal history
History of art;

B. Faculty of Law

Roman law
History of law
Constitutional law
International public law
Introduction to law and personal law.

## APPENDIX II C

Article 1. By joint decision of the universities (and university centres indicated) a department common to the said universities and university centres is set up with the title:

"Interuniversity Centre for Televised Instruction of ..."

Article 2. The contracting parties to the Agreement undertake to pool:

- their material and equipment for use in distant instruction;

- the staff and funds necessary to ensure the fullest and most efficient use of this equipment and material.

They also undertake to study together any desirable extensions of distant instruction, with special reference to pluridisciplinarity.

Article 3. The Interuniversity Centre for Televised Instruction has the following aims:

- to provide people who for various reasons are unable to attend university, and possibly also intra-mural students, with distant instruction in all suitable forms, using all appropriate means of presentation and dissemination;

- to participate in permanent education (cf Sections 1 and 24 of the Act of 12 November 1968) by providing initial and further training courses;

- to undertake or to participate in pedagogic or technical research into the application of audio-visual methods to teaching;

- to participate in the development of audio-visual methods in the establishments party to the Agreement and to co-ordinate their use.

Article 4. The Interuniversity Centre of Televised Instruction has its seat at the University of .....

Article 5. The Interuniversity Centre of Televised Instruction is administered by a Council and managed by a Director.

Article 6. The Council comprises ..... members:

- ..... ex officio members
  the presidents of the establishments party to the Agreement or their representatives

- ..... members elected by the councils of these establishments
  ..... teaching staff, ..... for the University of .....
  ..... for the University of .....
  ..... for the University of .....

- ..... members elected by the staff of the Centre (teachers, administrators and technicians)

- ..... outside personalities (chosen by the other members of the Council for their special competence in televised instruction).

The Director of the Centre or his representative, attends the Council's meetings.

Article 7. Members are elected for a period of (3) years. Their mandate shall come to an end if they cease to exercise the function by virtue of which they were elected. In this event, and for any other reason which definitively prevents them from sitting on the Council, elections are to be held to fill the seats left vacant on the Council.

The above provisions apply also to outside persons.

Minutes of the meetings must be sent to all the contracting parties.

Article 8. The Interuniversity Centre for Televised Instruction is managed by a Director appointed for 3 years, on the proposal of the Centre's Council, by the President of the University where the Centre has its seat, in agreement with the Presidents of the contracting parties. The Director may be re-appointed.

Article 9. Functions of the Council: The Council supervises the work of the Interuniversity Centre for Televised Instruction. In particular it is responsible for:

- approving the general programme of action in fulfilment of the aims defined in Article 3 and supervising its execution,

- drawing up the Centre's draft budget, for approval by the Councils of the contracting parties.

Article 10. Functions of the Director: The Director manages the Centre. In this capacity he takes all decisions consistent with the Agreement concerning the use of distant study methods. In particular he:

- draws up the budget and implements it,

- draws up the programme of work to be undertaken by the Centre in the pursuance of its aims and is responsible for its execution,

- directs the Centre's staff.

Article 11. Staff and equipment: The contracting parties agree to put at the disposal of the Centre the following categories of staff, who shall be paid for out of their own budgets:

- teachers
- technicians
- administrators.

Requests for new posts and for equipment and material for distant studies are made by the Council and submitted to the Minister by the contracting parties.

Article 12. Financial arrangements: The University where the Centre has its seat places at its disposal the specific appropriations made available to it for distant studies. Each of the contracting parties assigns to the said University that part of its operational appropriations which it decides to devote to distant studies; these funds are also made available to the Interuniversity Centre for Televised Instruction.

In addition, the University where the Centre has its seat receives a contribution towards working expenses, in particular to cover the despatch of documents, from the recipients of the instruction. The amount of such contributions is assigned by the said University to the Centre's budget.

Article 13. Agreement with the ORTF: The arrangements for broadcasting teaching programmes are laid down in an agreement between the ORTF and the University where the Centre has its seat. Prior to signature the agreement must be submitted to the Minister for approval.

Article 14. Progress report: The Director draws up each year a report on the administration and work of the Centre. This report is submitted to the Centre's Council during the first quarter following the end of the corresponding administrative period. It is sent by the President of the University where the Centre has its seat to the Presidents of the contracting parties and to the Minister of Education.

2. The Assembly

- Each institution of higher education shall send 2 delegates to the Assembly: -

  - its President or Rector
  - a member of the teaching staff and a student, alternately.

- The President shall take part in the discussions of the Assembly with the right to speak and vote.

- The Assembly shall:

  a. determine the statutes by a two-thirds majority;

  b. choose the members of the Senate and choose or confirm in office the members of the Praesidium;

  c. make proposals to the Senate regarding the planning of programmes;

  d. advise the Praesidium on its Annual Report;

  e. take decisions on matters submitted to it by the Senate.

  Each member of the Assembly may address written inquiries to the Praesidium.

3. The Senate

- Its composition shall be as follows:

  a. the President, who shall take the Chair;

  b. the Vice-Presidents;

  c. 7-14 members of institutions of higher education, elected for a period of at least 2 years by the Assembly, which shall also elect a permanent substitute for each member.

- The Director of the administrative headquarters and the Administrative Director of the Research and Development Centre shall attend meetings with the right to speak and to vote.

- The Senate shall take decisions on all matters not expressly attributed to the competence of another body by the terms of this Agreement and the Statute.

  In particular it shall:

  a. be responsible for the planning, working out and execution of projects, and for research;

  b. be competent to lay down guiding principles for the Research and Development Centre in respect of planning; it shall have the right of decision in the event of a dispute between the specialised committees and the groups responsible for examining projects;

  c. determine the draft budget and submit it to the Kuratorium for decision.

  d. draw up internal regulations for the Praesidium, defining in particular the financial limits within which the President and the Praesidium may undertake commitments;

  e. appoint, upon the proposal of the Praesidium, the Director of the administrative headquarters;

f. appoint the senior staff, as a general rule upon the proposal of the Research and Development Centre.

- The Praesidium and the offices of the Association shall keep the Senate regularly informed on all matters of importance.

  In addition, the Senate may ask for information on any matters where it sees fit to do so.

- The decisions of the Senate must be communicated to the Kuratorium and the Assembly.

4. The President

- The President shall be elected by the Assembly for a period of at least 5 years. His nomination must be confirmed by the Kuratorium. He may, under the statute, be dismissed following a "Constructive vote of no-confidence".

- He shall direct the Association. In collaboration with the Vice-President he is to prepare and execute the decisions of the Senate. He may oppose decisions which run contrary to law, the Agreement, the statute or the budget; in such cases consideration of the matter must be put off until a later date. If no solution is found, the Kuratorium must be informed.

- The President shall represent the Association. He is the head of the staff of the Association.

- In an emergency he may take decisions falling within the competence of other bodies. These decisions will no longer be valid once the bodies concerned express another opinion.

- If, according to the internal regulations, he is unable to attend in person, he will be represented as follows:

  before the court and in administrative matters by the Director of the administrative headquarters;

  in other circumstances by a Vice-President.

5. The Praesidium

- The Praesidium shall consist of the President and 3 Vice-Presidents.

- The Vice-Presidents will not be employed full-time. They shall receive an allowance. Their term of office lasts 2 years.

- One Vice-President is to be nominated by the radio and television stations. This nomination must be confirmed by the Assembly.

- 2 Vice-Presidents are to be elected by the Assembly, one being proposed by the specialised committees, the other by the student members of the Association. The names of 3 candidates must be put forward.

6. The Kuratorium

- The Kuratorium shall be composed of:

  2 representatives nominated by the Federation, who shall have 11 votes;

  11 representatives nominated by the Länder;

  11 representatives of the supra-regional associations of establishments of higher education;

2 representatives of broadcasting stations, which shall have 11 votes.

- The Praesidium shall take part in the meetings of the Kuratorium with right to speak and to vote.

- The Kuratorium

  a. shall approve the statute of the Association;

  b. shall determine the Association's budget and approve its programme of work. A decision which is not in accordance with the proposals of the Senate shall not be put into application if the Senate pronounces against it within one month, by a majority of two-thirds of those present and of at least half its members. The budget must receive the affirmative vote of the Federation and of at least 6 Länder;

  c. may make proposals to the Senate regarding the planning of programmes;

  d. shall decide on the annual financial accounts submitted by the President;

  e. shall confirm the appointment of the President and the director of the administrative headquarters;

  f. shall be statutorily responsible for the other bodies and may, without thereby affecting the prerogatives of the President, oppose the decisions referred to in paragraph 4 above.

7. (quorum needed for decisions to be taken at each meeting)

8. Institutions of the Association

The Assembly shall carry out the tasks assigned to it through:

- a Research and Development Centre, situated with the administrative services,

- specialised committees,

- groups responsible for drawing up projects; these groups must be set up in collaboration with the various member universities.

## APPENDIX III

### III - CREATION OF A EUROPEAN INTER-UNIVERSITY INSTITUTE FOR THE DEVELOPMENT OF MULTI-MEDIA DISTANT STUDY SYSTEMS

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A. Recommendation 650 (1971) of the Consultative Assembly of the Council of Europe;

B. Interim reply of the Committee of Ministers.

## APPENDIX III A

### RECOMMENDATION 650 (1971) (1)

on the creation of a "European Television University"
(European Inter-University Institute for the development
of multi-media distant study systems)

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The Assembly,

1. Recalling its report on university exchanges and the European University (Doc. 2831) and Order No. 308 (1970), in which the Committee on Culture and Education was instructed to "work out, with the help of experts, a project for a European Television University";

2. Considering the increasingly important role of distant study systems in a European society which is characterised by enormous needs in the area of education and culture;

3. Considering that, within the context of a system of permanent education and cultural development in Europe, the establishment of an institution for the purpose of complementing and extending the work of European universities and of co-ordinating it in the area of distant study systems (a field in which the universities are often deficient) would seem to be increasingly useful;

4. Emphasising that such an institution should not be a super-university, but that it should play the role of catalyst in the movement towards the Europeanisation of national universities, and that in addition it should serve as a "last chance" institution within adult education for all those desirous of overcoming initial handicaps;

5. Convinced that the establishment of a "European Television University", conceived as a European Inter-University Institute for the development of multi-media distant study systems, would permit a joint approach to the problems which face European universities in this field, with a view to reaching quicker and more economical solutions;

6. Recommends that the Committee of Ministers:

a. invite the governments of States adhering to the European Cultural Convention to create at Florence a European Inter-University Institute for the development of multi-media distant study systems (European Television University) as set out in the report of its Committee on Culture and Education (Doc. 3018);

b. instruct the Committee for Higher Education and Research of the CCC to undertake the examination and establishment of this project.

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(1) Assembly debate on 6 October 1971 (12th Sitting) (see Doc. 3018, report of the Committee on Culture and Education).

Text adopted by the Assembly on 6 October 1971 (12th Sitting).

## APPENDIX III B

Interim reply of the Committee of Ministers of
the Council of Europe to Assembly Recommendation 650

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"The Committee of Ministers has examined Recommendation 650 particularly in the light of an opinion submitted by the CCC.

The Committee is in principle favourably disposed towards the proposal of the Assembly to set up a European Inter-University Institute for the development of multi-media distant study systems. However, before taking any decision, it has requested the Secretariat to prepare by the end of 1973, a more detailed study on the following questions:

- a fairly comprehensive outline of work for the first phase of the institute's existence, including assignment of priorities to the main task in each of the 4 areas outlined in the report;

- alternative detailed cost-estimates based on different assumptions about the possible location and the work programme;

- clarification of the alternative proposals for the location of the institute.

The Committee will return to the question in due course in the light of the above study.

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